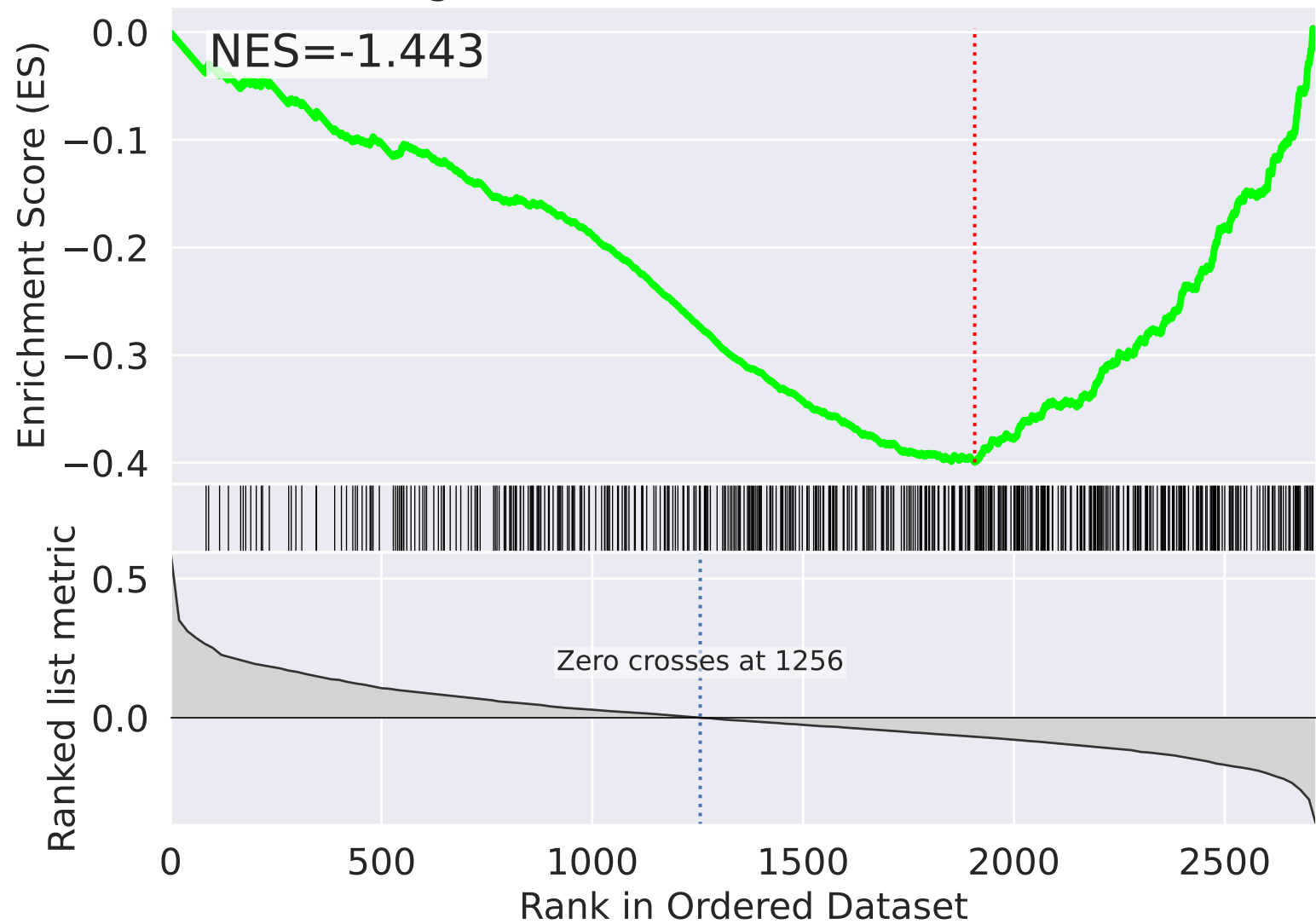
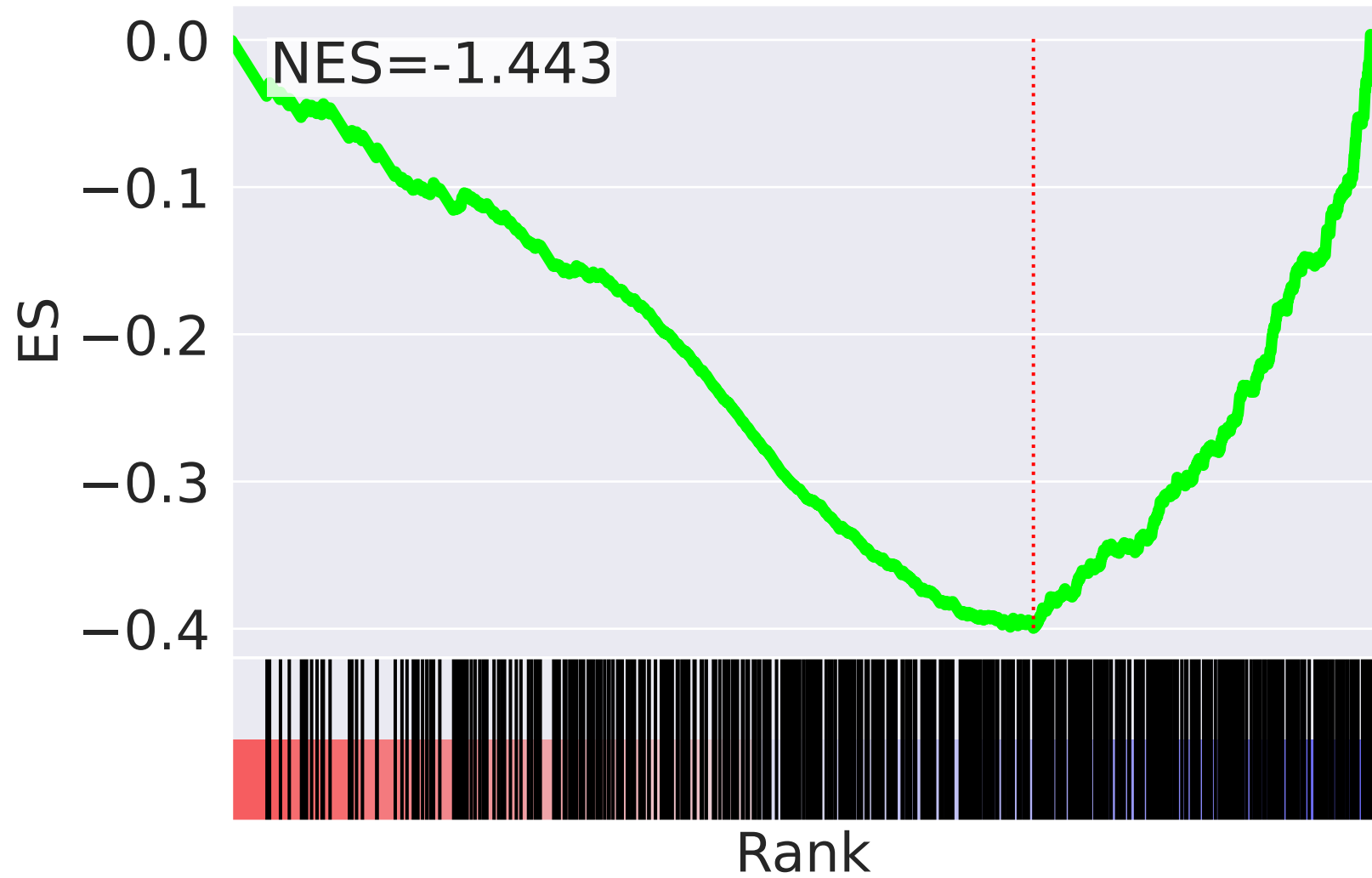


The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=1$

Signal Transduction R-HSA-162582



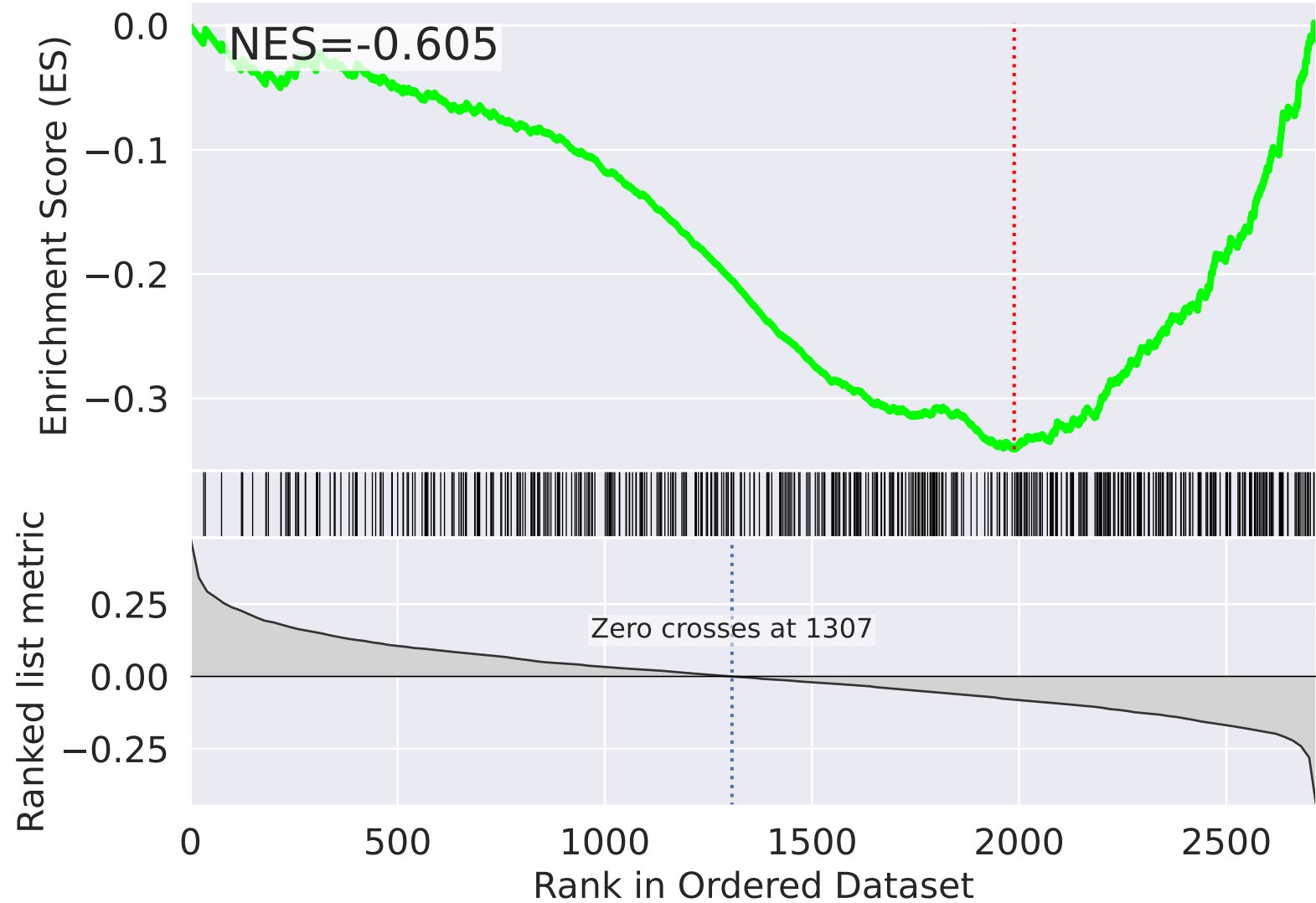
Signal Transduction R-HSA-162582



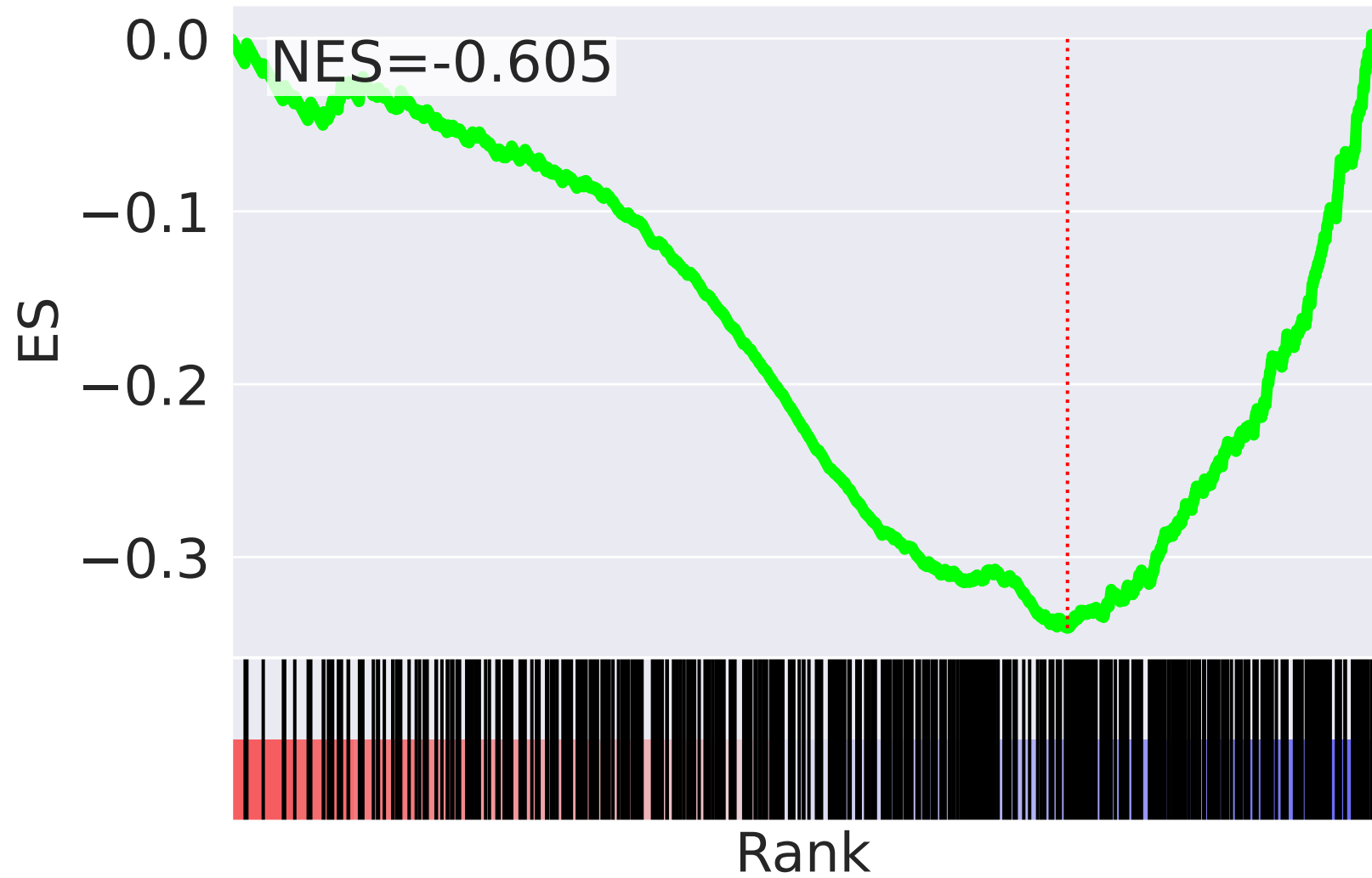
NES		SET
-7.208		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
-6.866		mRNA Splicing R-HSA-72172
-6.745		mRNA Splicing - Major Pathway R-HSA-72163
6.734		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
-6.559		M Phase R-HSA-68886
-6.416		Mitotic Metaphase And Anaphase R-HSA-2555396
6.410		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
-6.347		Mitotic Anaphase R-HSA-68882
-6.327		HIV Infection R-HSA-162906
-6.071		Separation Of Sister Chromatids R-HSA-2467813
6.029		Respiratory Electron Transport R-HSA-611105
5.987		rRNA Processing R-HSA-72312
-5.964		Host Interactions Of HIV Factors R-HSA-162909
-5.953		Disorders Of Transmembrane Transporters R-HSA-5619115
-5.938		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=2$

Signal Transduction R-HSA-162582

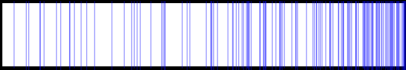
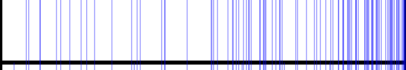
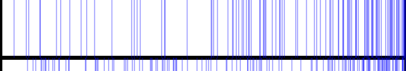
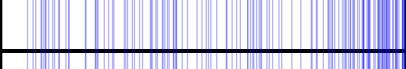
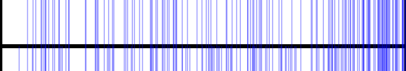
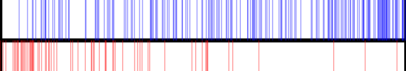
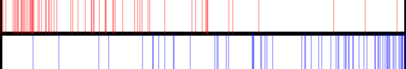
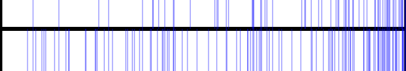
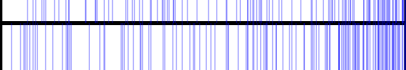
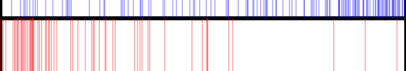
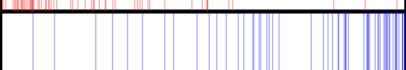
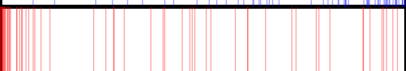

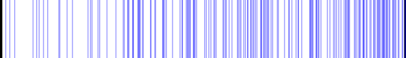



Signal Transduction R-HSA-162582



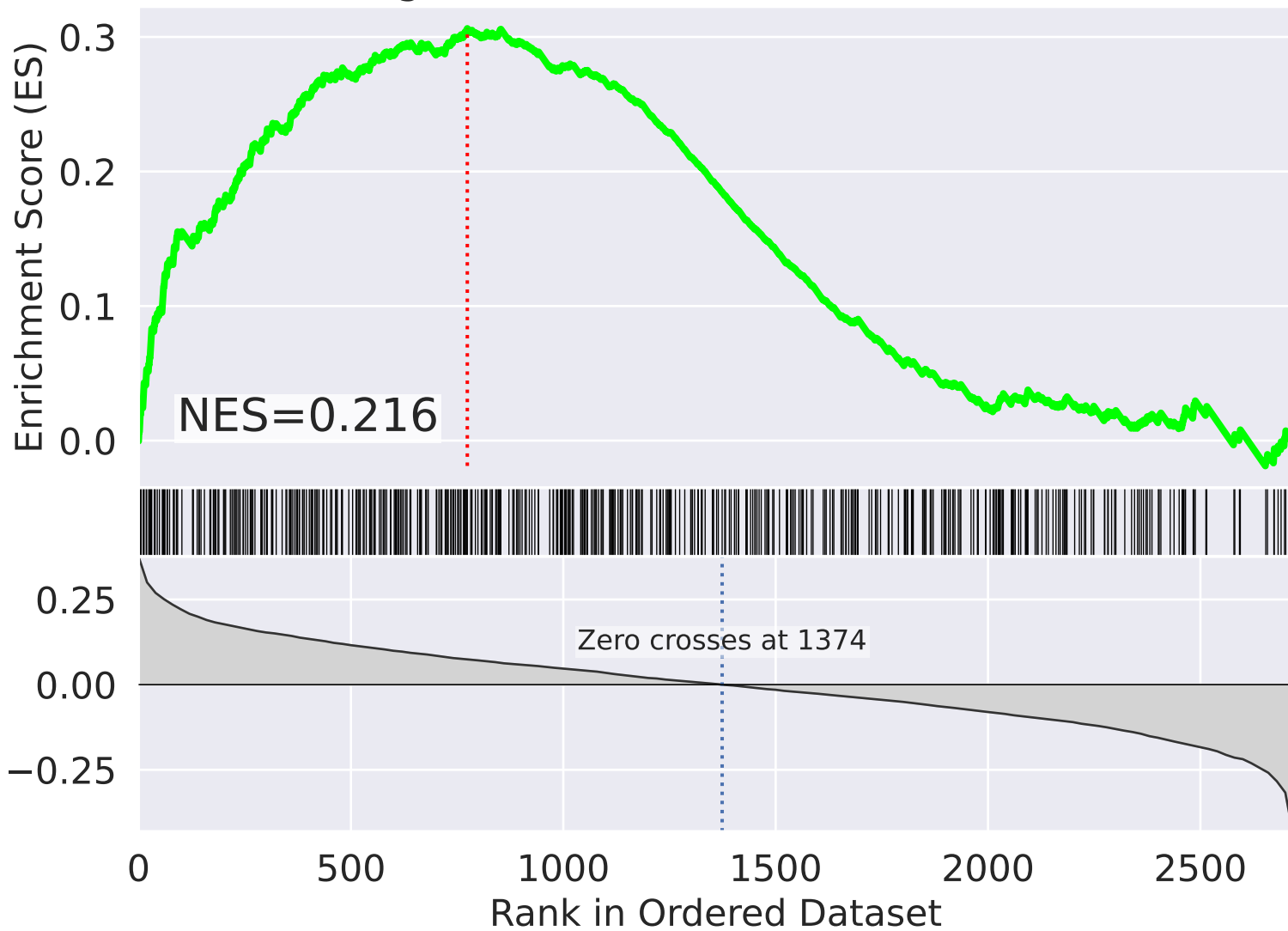
NES

SET

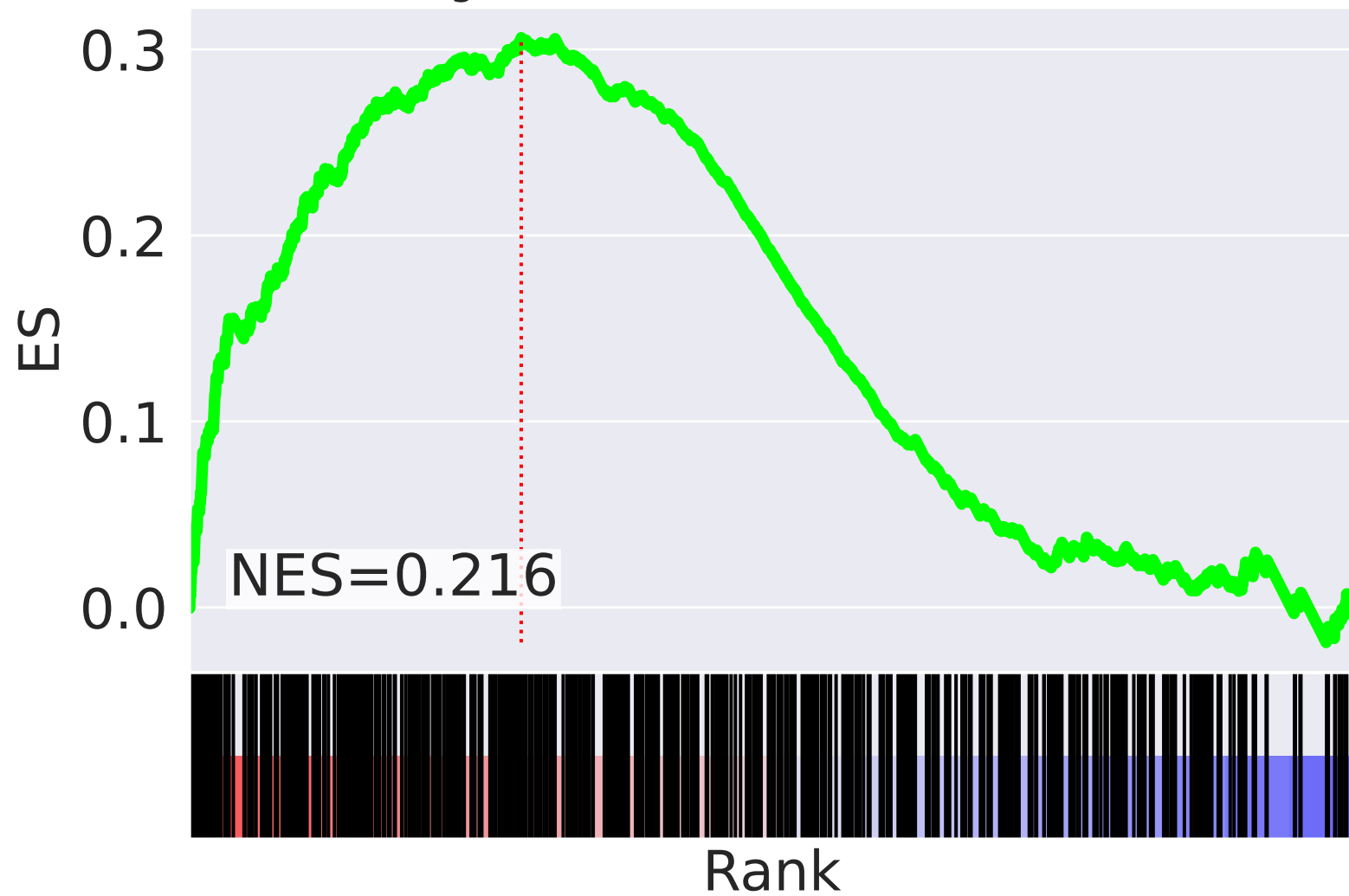
-6.658		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
-6.412		mRNA Splicing - Major Pathway R-HSA-72163
-6.330		mRNA Splicing R-HSA-72172
-6.114		Mitotic Metaphase And Anaphase R-HSA-2555396
-6.083		Mitotic Anaphase R-HSA-68882
-5.994		M Phase R-HSA-68886
5.847		rRNA Processing R-HSA-72312
-5.828		TCF Dependent Signaling In Response To WNT R-HSA-201681
-5.821		Separation Of Sister Chromatids R-HSA-2467813
-5.813		HIV Infection R-HSA-162906
5.788		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
-5.689		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
5.628		tRNA Processing R-HSA-72306
-5.597		Host Interactions Of HIV Factors R-HSA-162909
-5.540		Cytokine Signaling In Immune System R-HSA-1280215


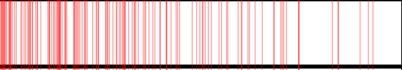
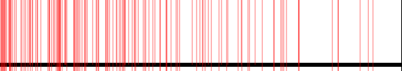
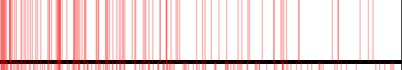
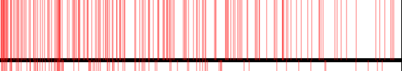
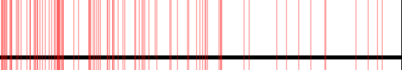
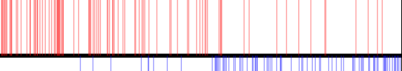
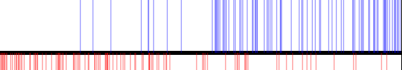
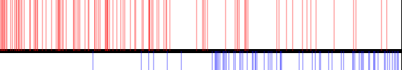
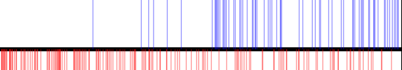
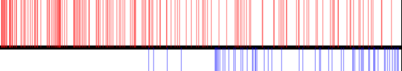
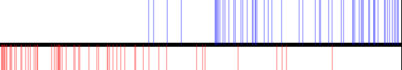
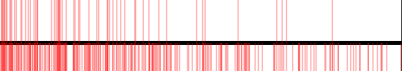
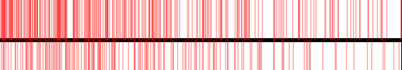

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=3$

Signal Transduction R-HSA-162582



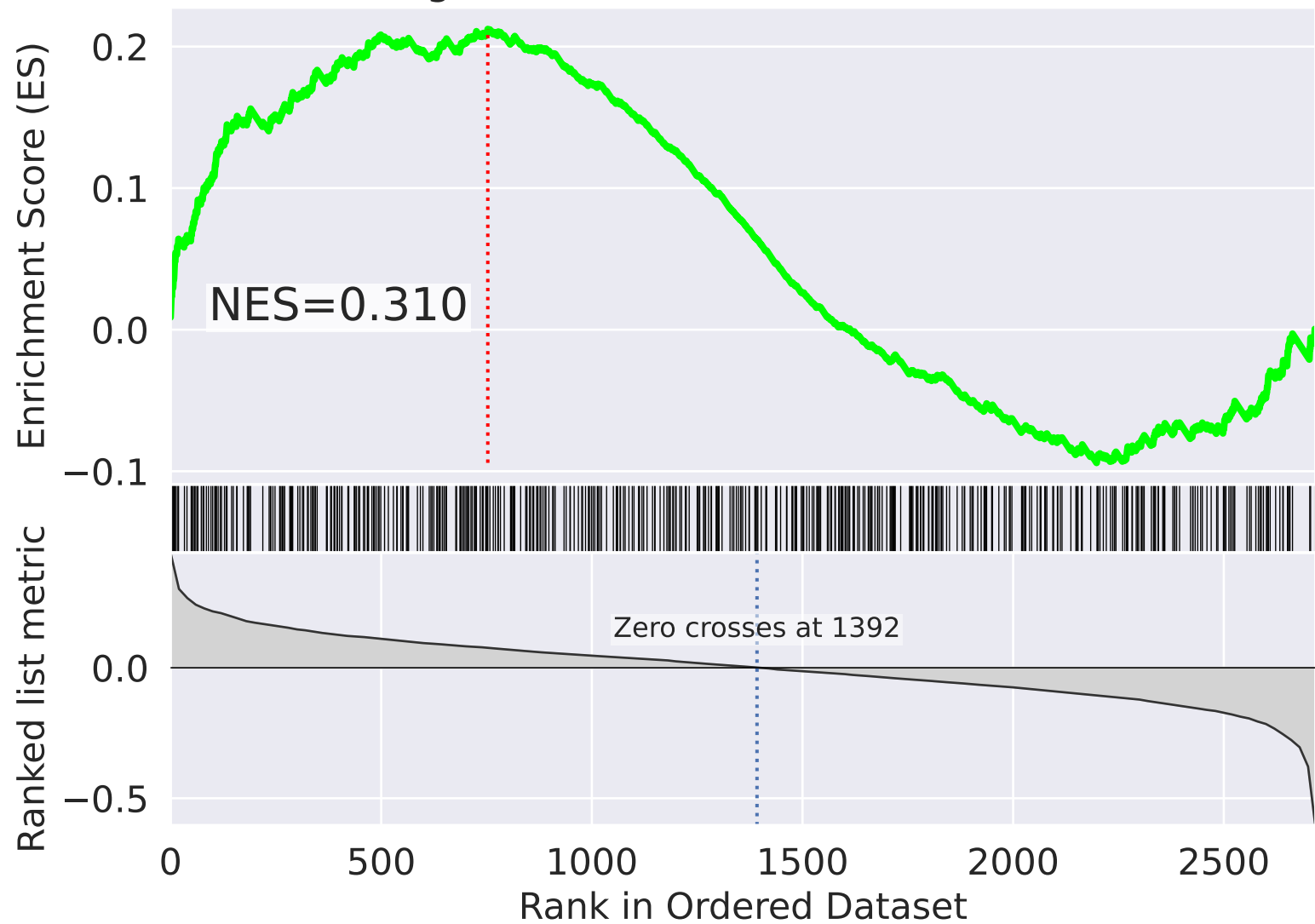
Signal Transduction R-HSA-162582



NES		SET
7.406		M Phase R-HSA-68886
7.102		Mitotic Metaphase And Anaphase R-HSA-2555396
7.033		Mitotic Anaphase R-HSA-68882
6.653		Separation Of Sister Chromatids R-HSA-2467813
6.409		Adaptive Immune System R-HSA-1280218
6.302		Mitotic G2-G2/M Phases R-HSA-453274
6.188		G2/M Transition R-HSA-69275
-5.984		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
5.924		S Phase R-HSA-69242
-5.712		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
5.710		Cell Cycle Checkpoints R-HSA-69620
-5.703		Respiratory Electron Transport R-HSA-611105
5.671		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
5.507		Cell Cycle, Mitotic R-HSA-69278
5.500		Vesicle-mediated Transport R-HSA-5653656

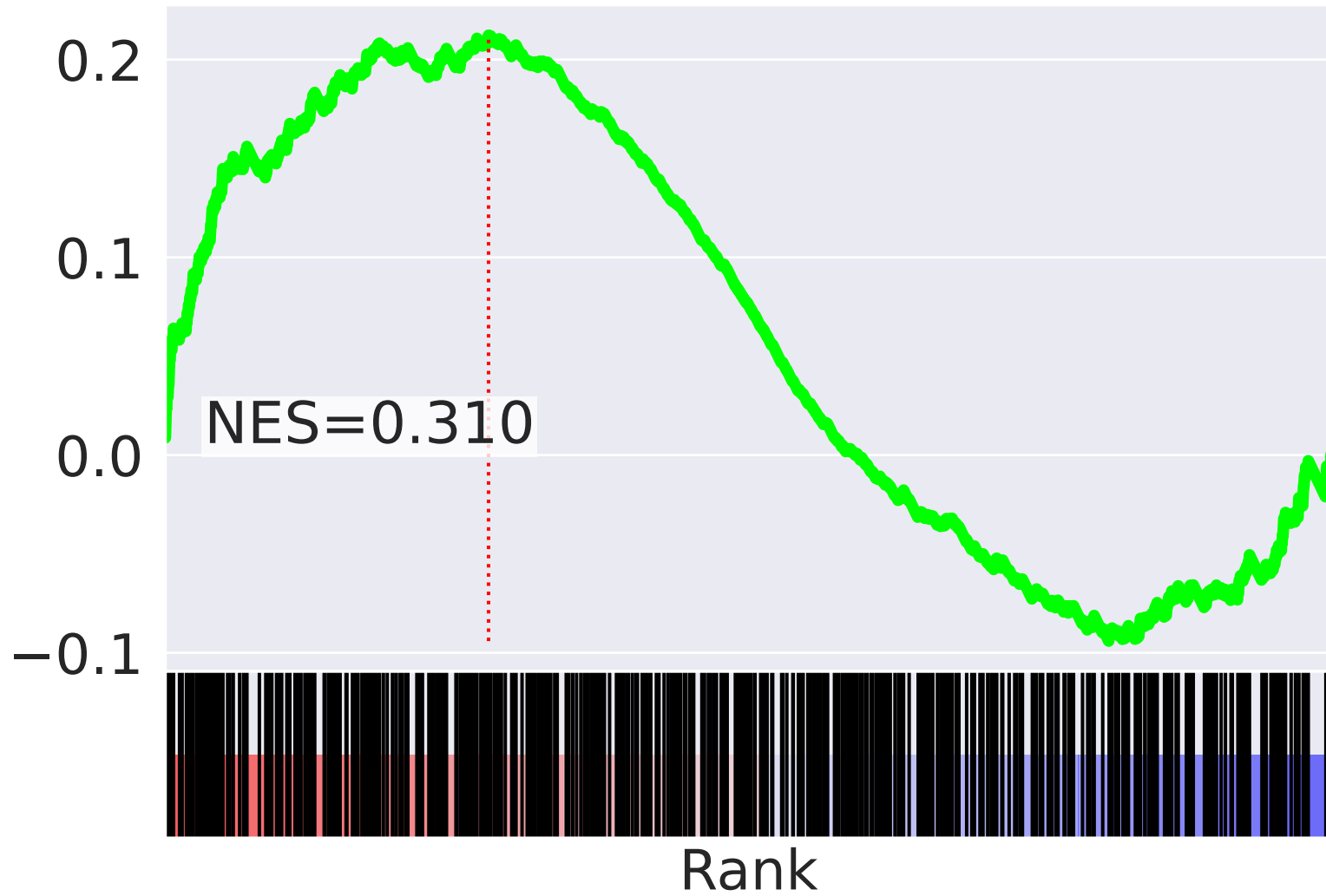
The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=4$



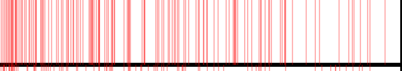
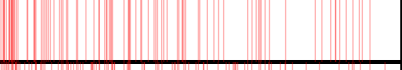
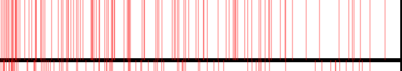
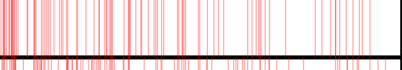
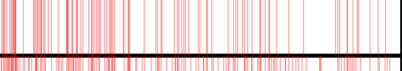
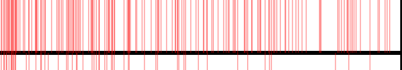
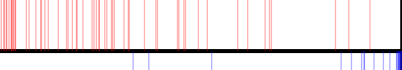
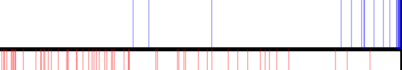
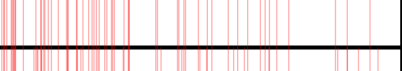
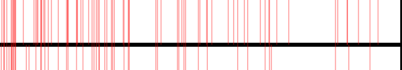
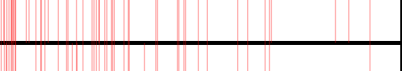
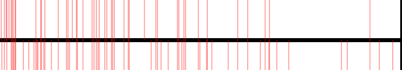
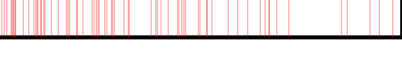
Signal Transduction R-HSA-162582



Signal Transduction R-HSA-162582

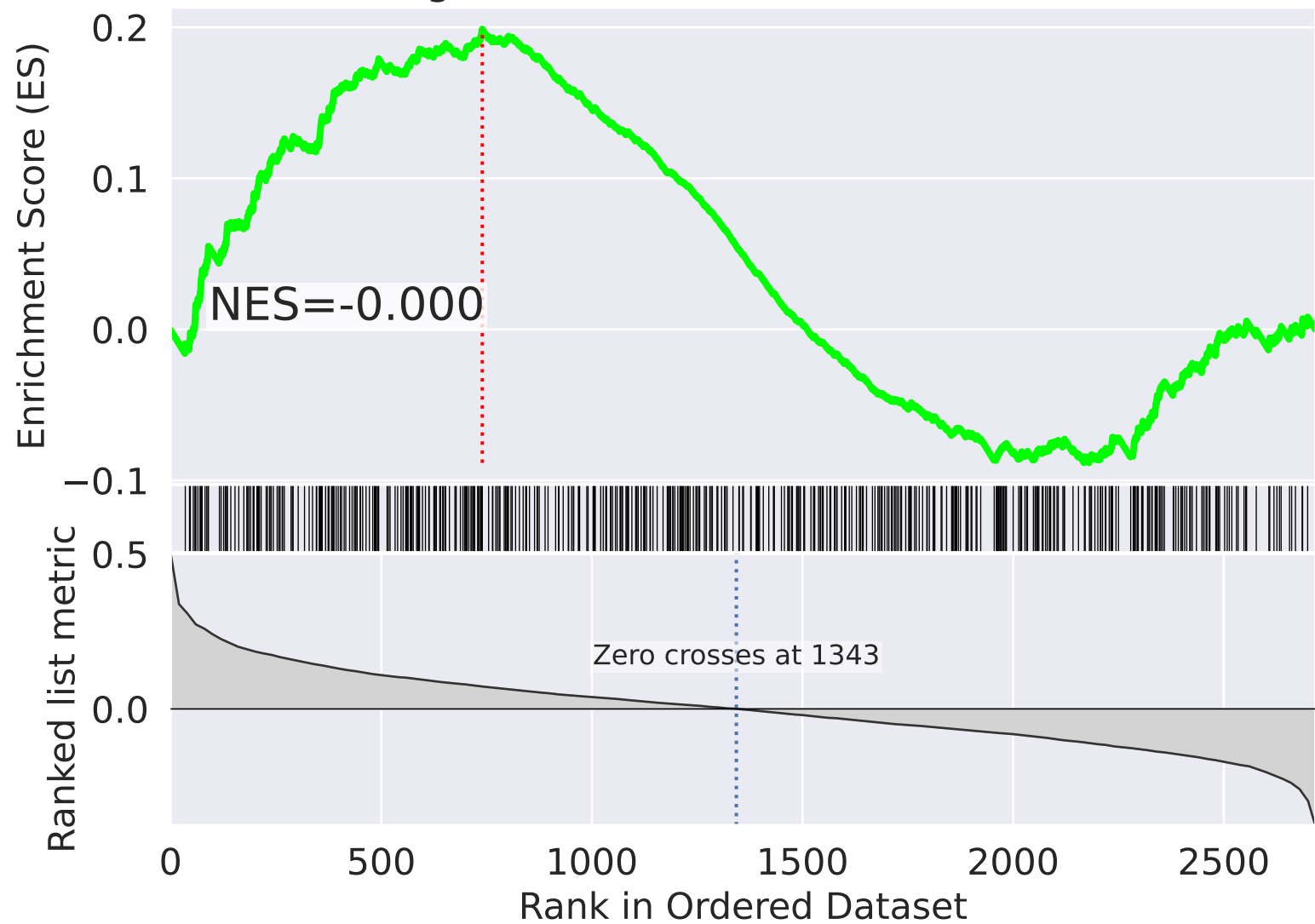
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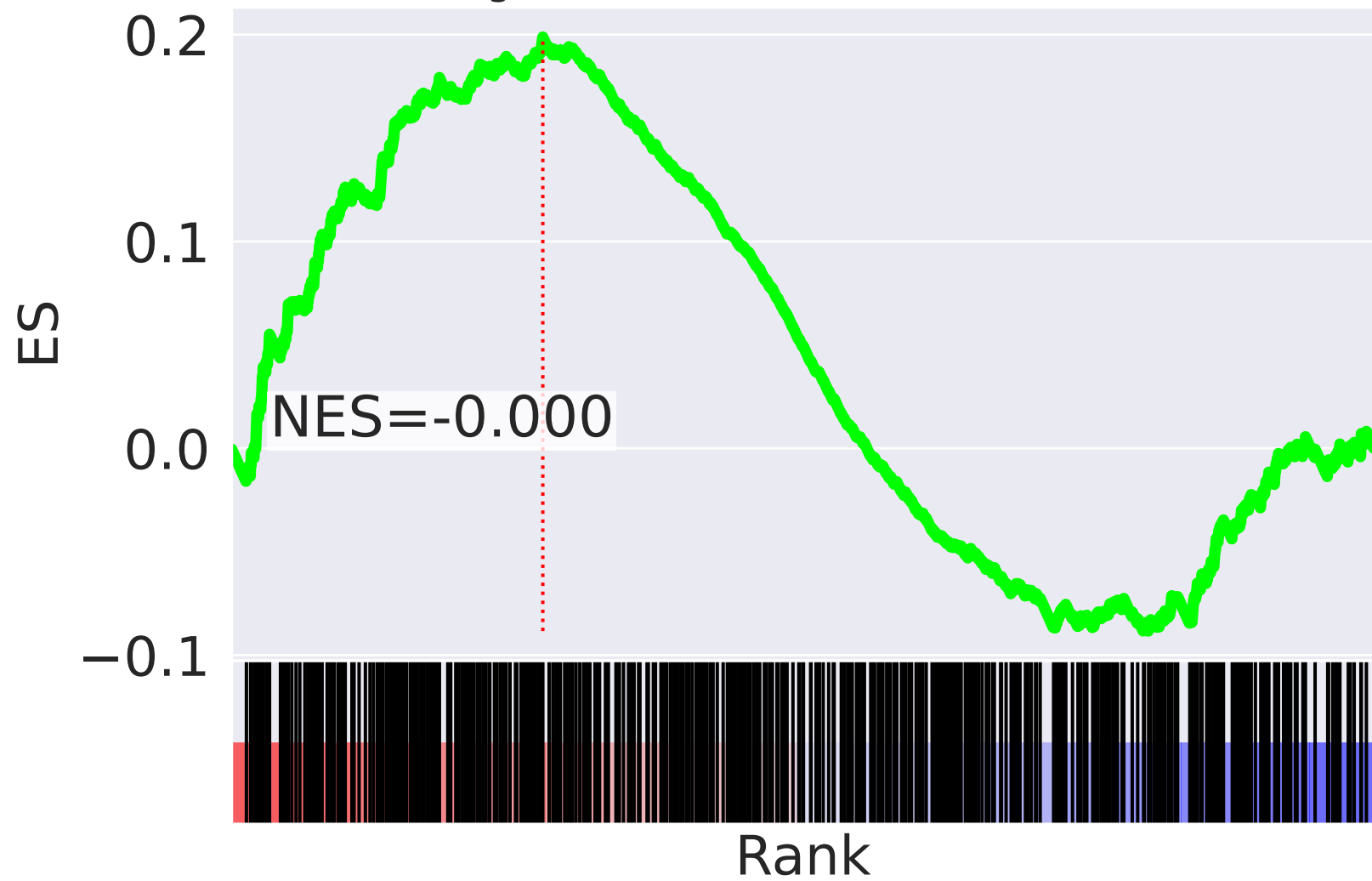
NES		SET
6.295		M Phase R-HSA-68886
6.148		Mitotic Metaphase And Anaphase R-HSA-2555396
6.084		Mitotic Anaphase R-HSA-68882
5.661		Mitotic G2-G2/M Phases R-HSA-453274
5.542		Separation Of Sister Chromatids R-HSA-2467813
5.528		G2/M Transition R-HSA-69275
5.320		S Phase R-HSA-69242
5.042		Cell Cycle Checkpoints R-HSA-69620
5.022		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
-5.010		Metabolism Of Nucleotides R-HSA-15869
4.857		Switching Of Origins To A Post-Replicative State R-HSA-69052
4.832		Synthesis Of DNA R-HSA-69239
4.731		Regulation Of APC/C Activators Between G1/S And Early Anaphase R-HSA-176408
4.600		APC/C:Cdh1 Mediated Degradation Of Cdc20 And APC/C:Cdh1 Targets In Late Mitosis/Early G1 R-HSA-174178
4.582		DNA Replication Pre-Initiation R-HSA-69002




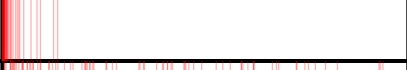
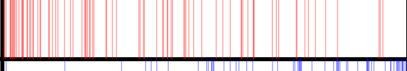
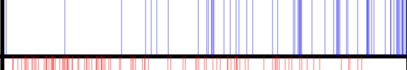
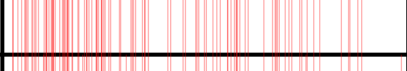
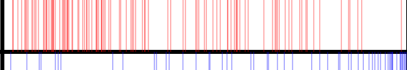
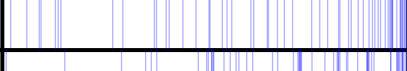
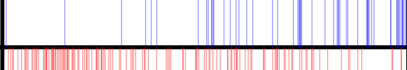
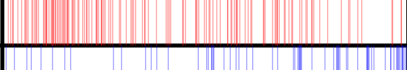
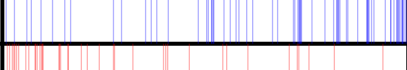
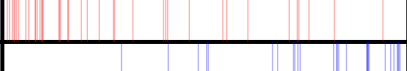
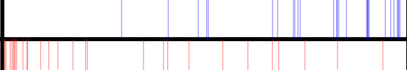

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=5$

Signal Transduction R-HSA-162582



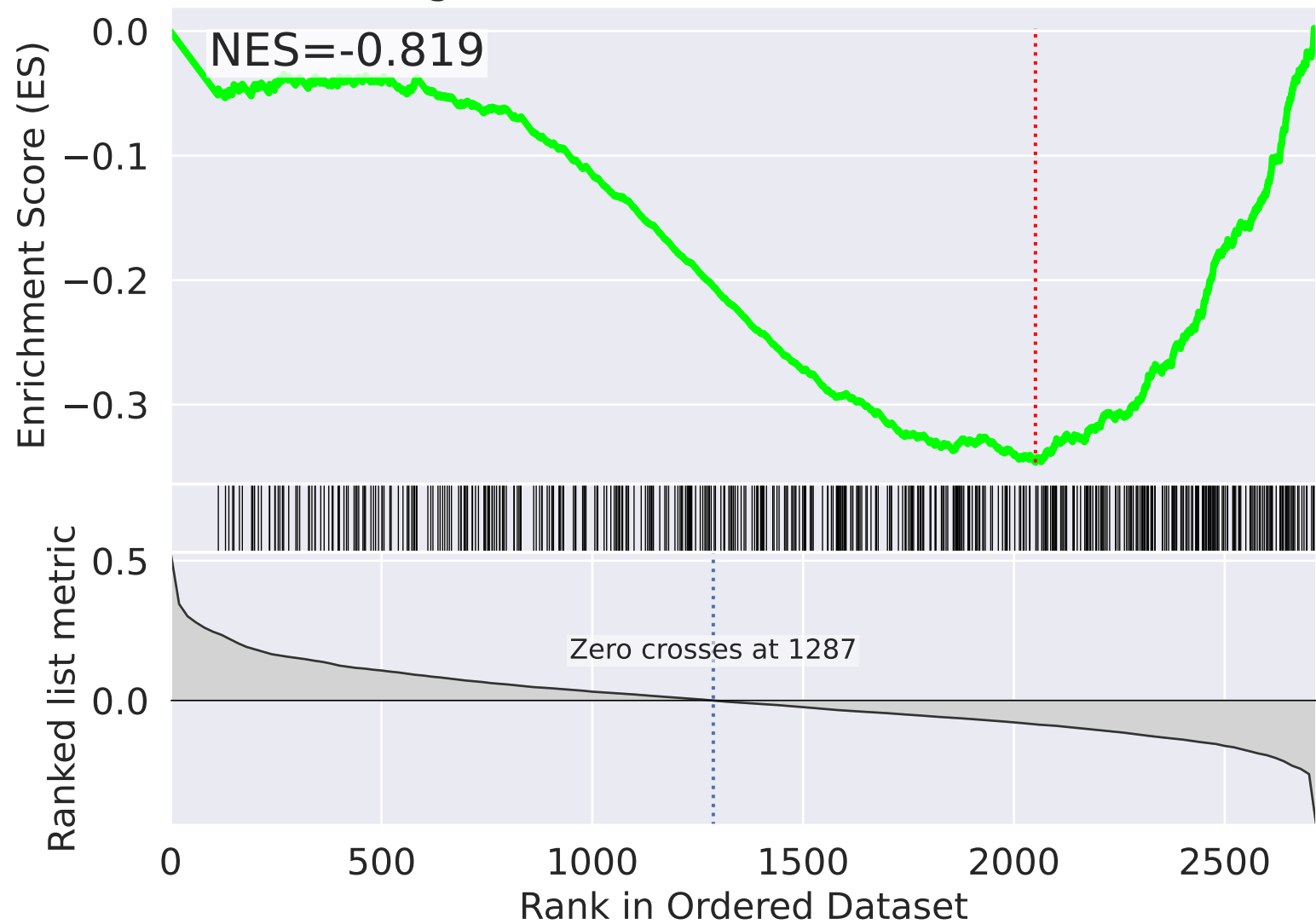
Signal Transduction R-HSA-162582



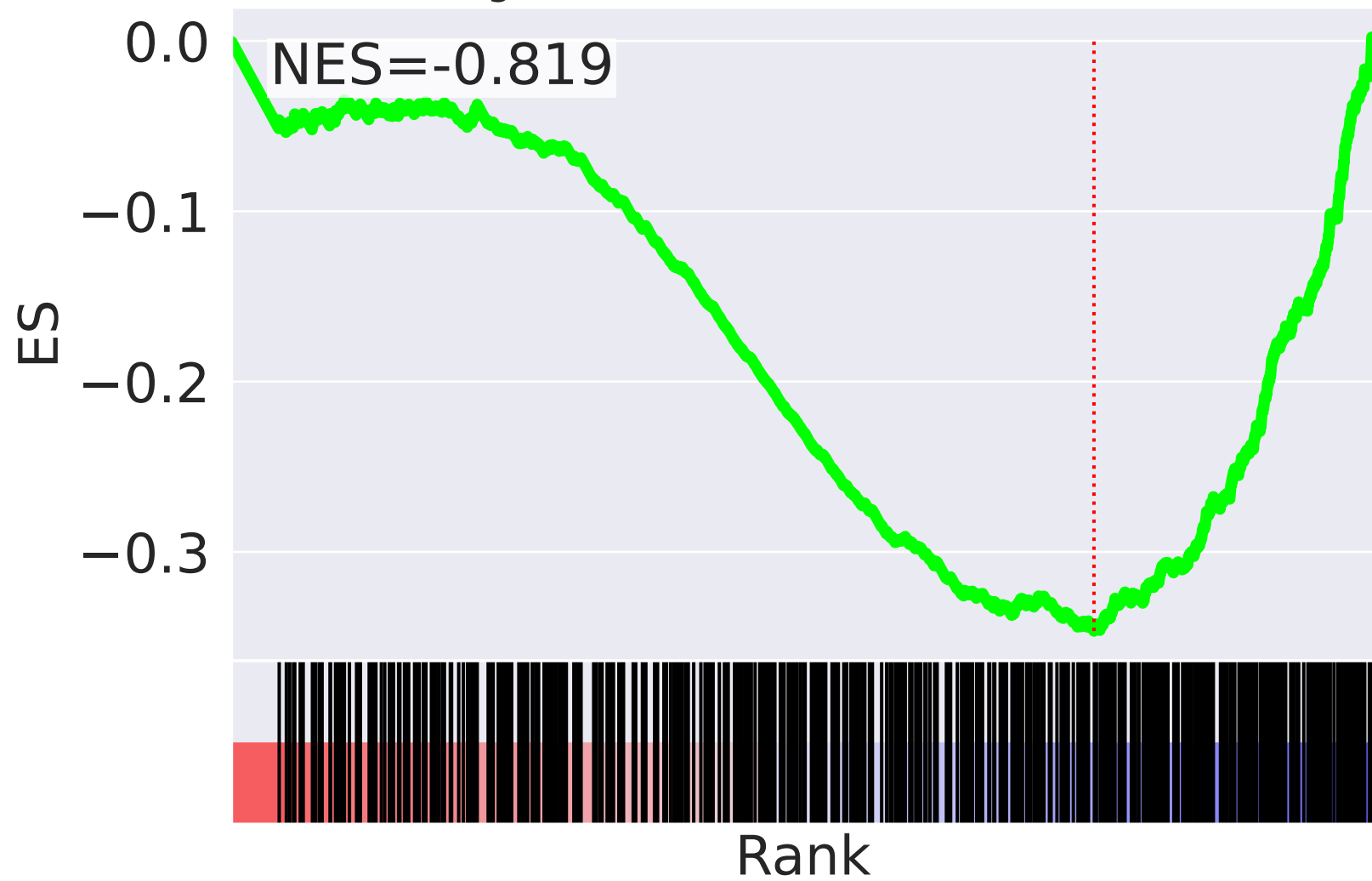
NES		SET
inf		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
inf		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
7.787		Respiratory Electron Transport R-HSA-611105
6.326		Complex I Biogenesis R-HSA-6799198
5.434		Cellular Response To Chemical Stress R-HSA-9711123
-5.265		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
4.972		mRNA Splicing - Major Pathway R-HSA-72163
4.872		mRNA Splicing R-HSA-72172
-4.859		tRNA Processing R-HSA-72306
-4.845		Major Pathway Of rRNA Processing In Nucleolus And Cytosol R-HSA-6791226
4.561		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
-4.300		rRNA Processing R-HSA-72312
4.165		Mitochondrial Biogenesis R-HSA-1592230
-4.041		rRNA Modification In Nucleus And Cytosol R-HSA-6790901
3.995		Cytoprotection By HMOX1 R-HSA-9707564

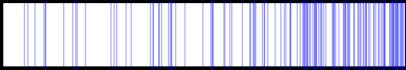
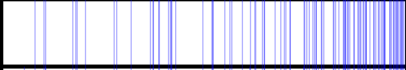
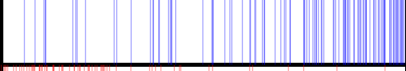

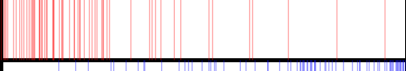
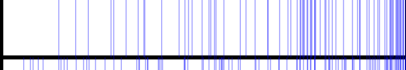
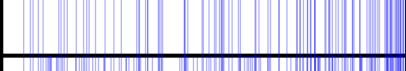

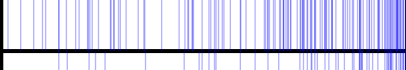
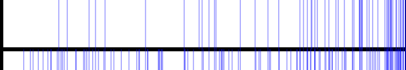
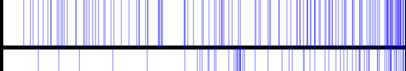
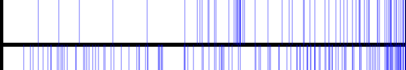
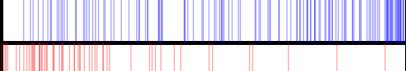
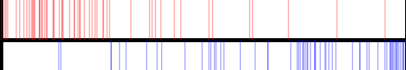

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=6$

Signal Transduction R-HSA-162582



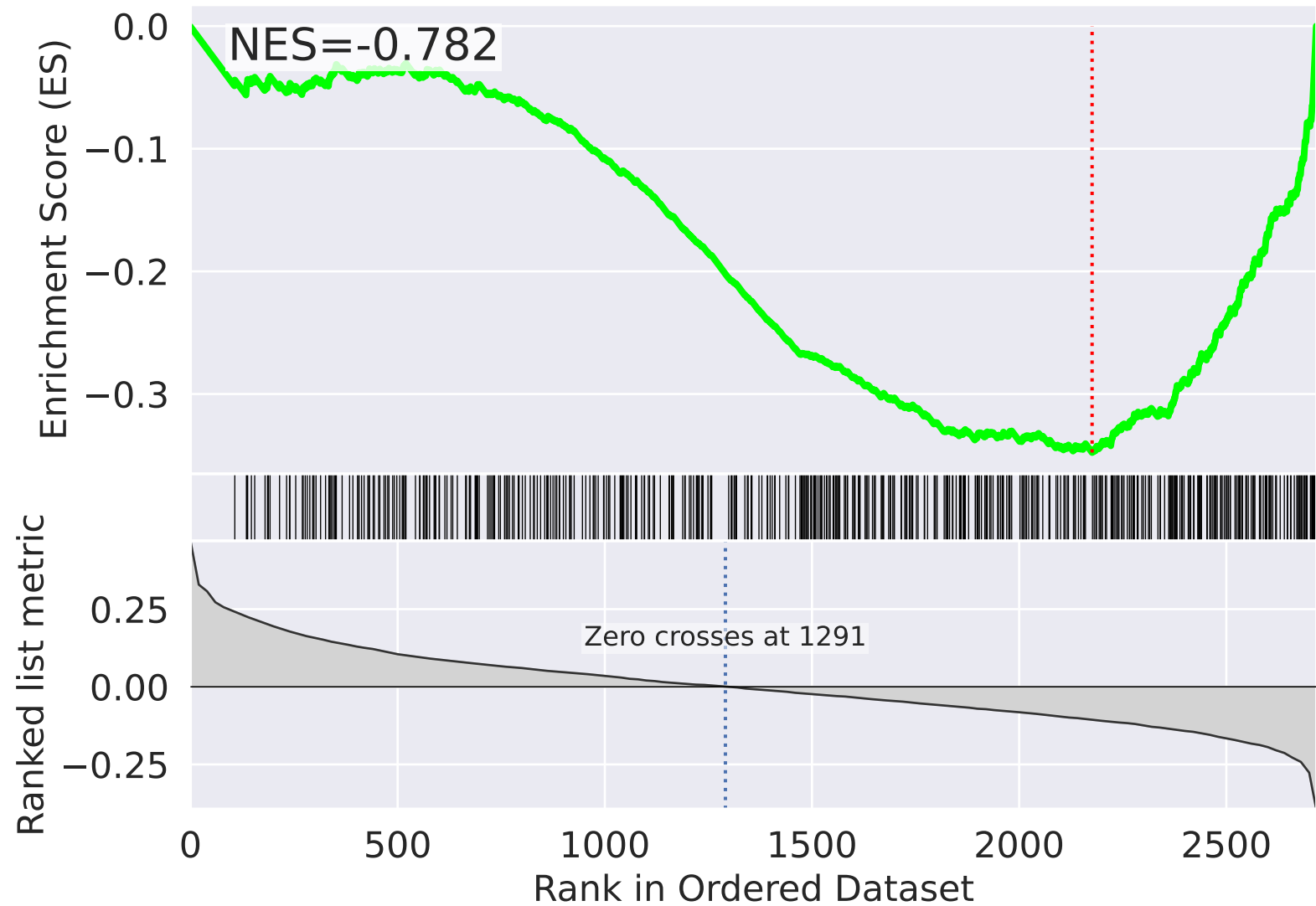
Signal Transduction R-HSA-162582



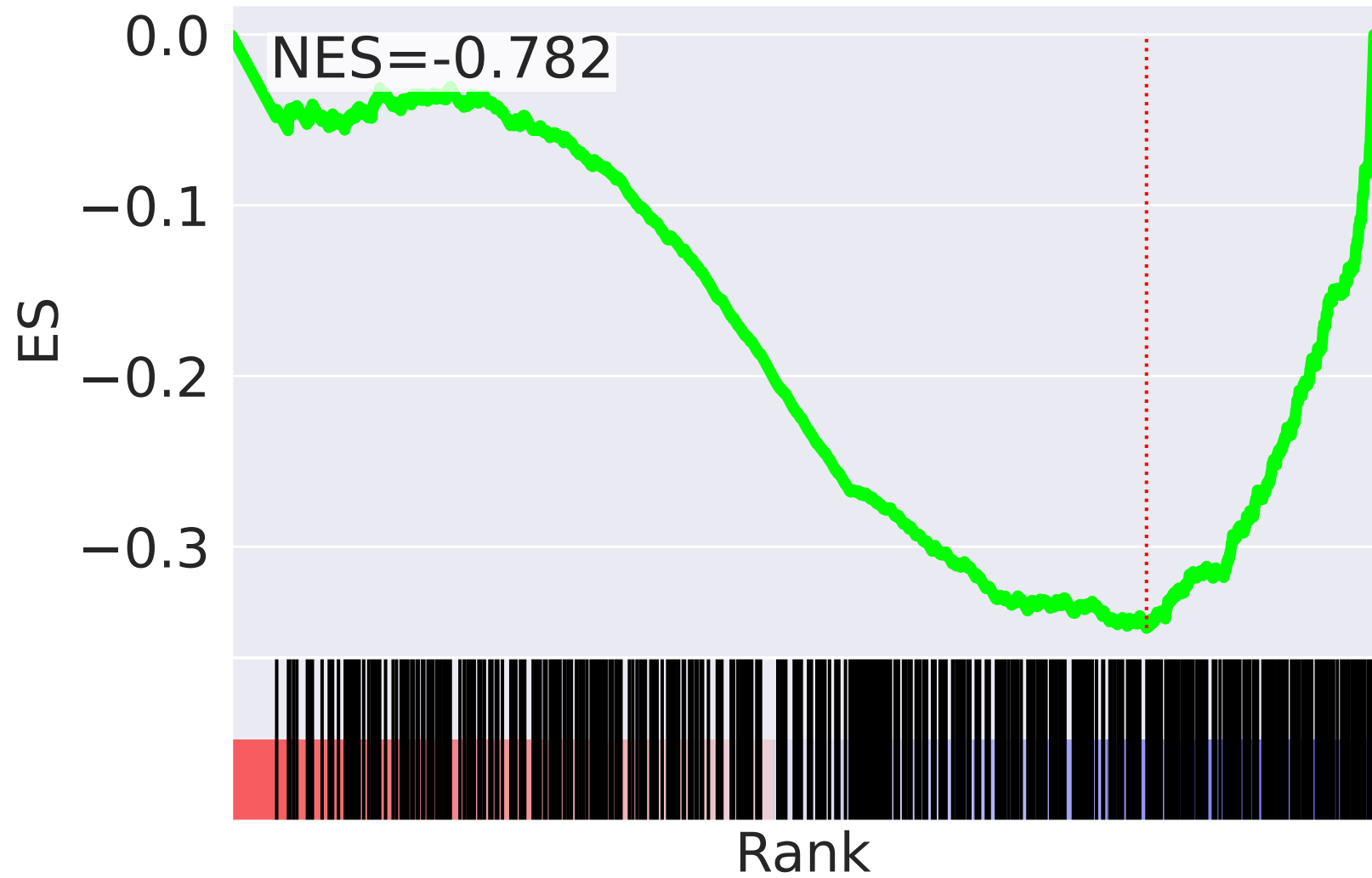
NES		SET
-6.584		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
-6.331		mRNA Splicing - Major Pathway R-HSA-72163
-6.247		mRNA Splicing R-HSA-72172
5.979		rRNA Processing R-HSA-72312
5.771		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
-5.709		Host Interactions Of HIV Factors R-HSA-162909
-5.682		Separation Of Sister Chromatids R-HSA-2467813
-5.595		M Phase R-HSA-68886
-5.589		HIV Infection R-HSA-162906
-5.587		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
-5.498		Mitotic Metaphase And Anaphase R-HSA-2555396
-5.445		TCF Dependent Signaling In Response To WNT R-HSA-201681
-5.437		Mitotic Anaphase R-HSA-68882
5.363		Major Pathway Of rRNA Processing In Nucleolus And Cytosol R-HSA-6791226
-5.331		Disorders Of Transmembrane Transporters R-HSA-5619115





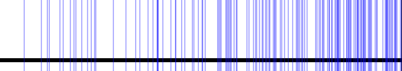
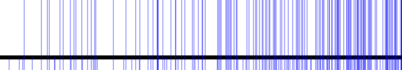
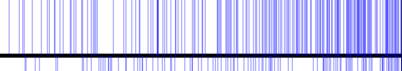
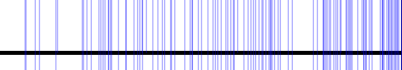

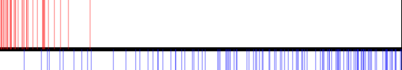
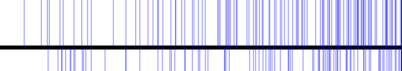
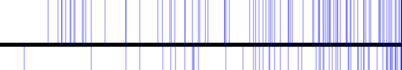
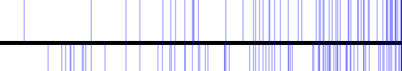


The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=7$

Signal Transduction R-HSA-162582



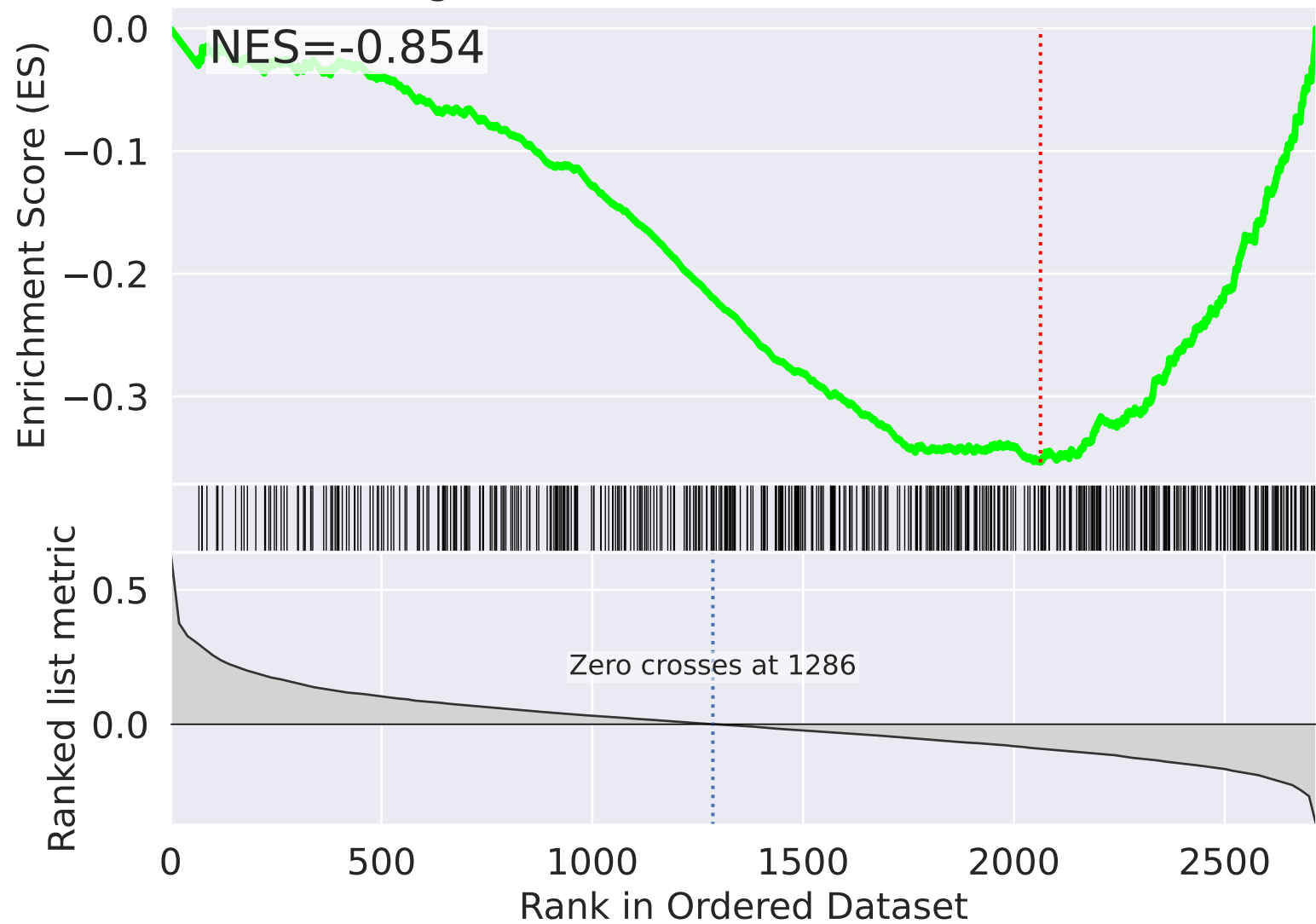
Signal Transduction R-HSA-162582



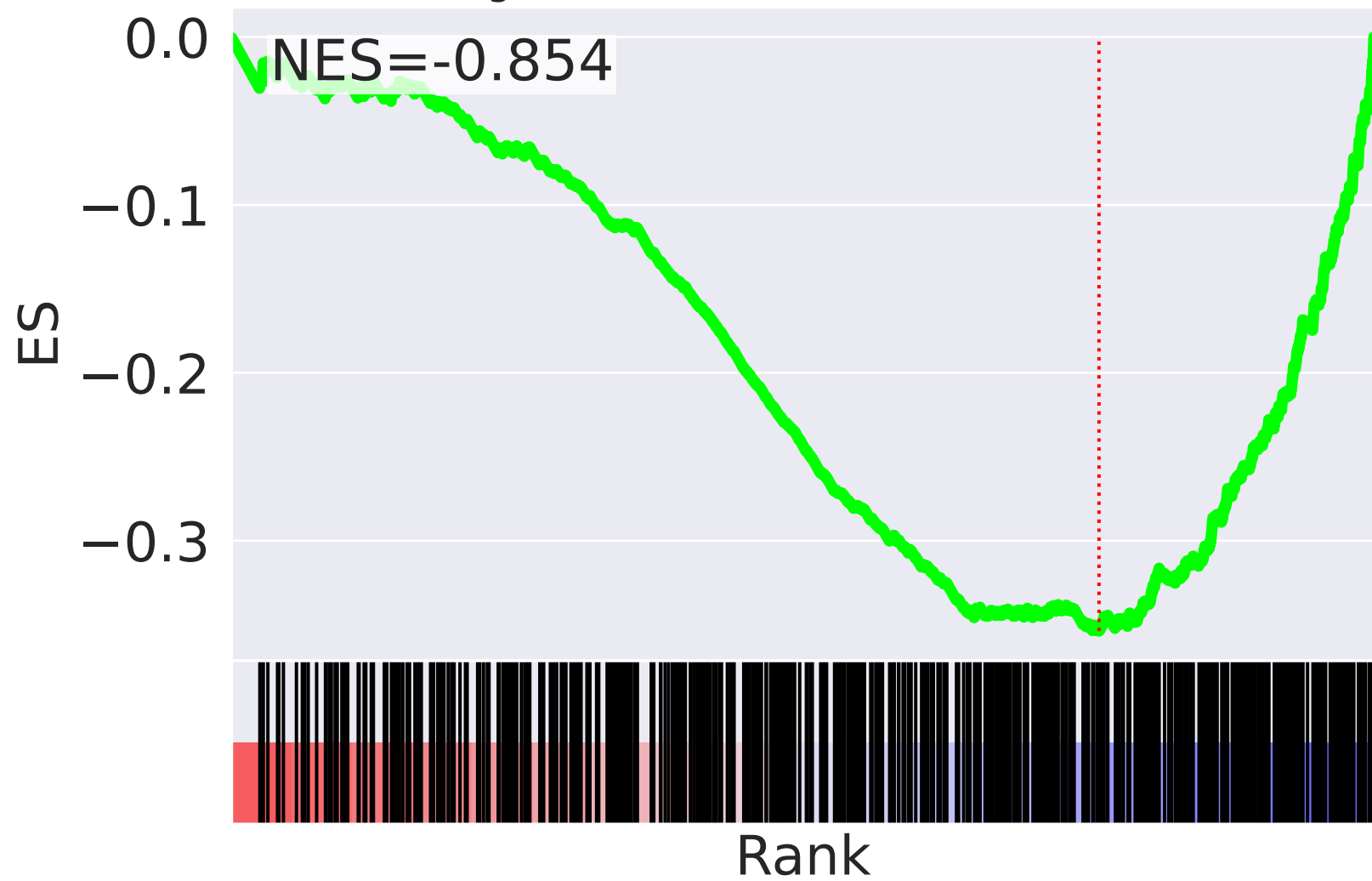
NES		SET
8.210		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
7.928		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
7.306		Respiratory Electron Transport R-HSA-611105
-6.295		Adaptive Immune System R-HSA-1280218
-6.185		Mitotic Metaphase And Anaphase R-HSA-2555396
-6.110		Mitotic Anaphase R-HSA-68882
-6.066		M Phase R-HSA-68886
-5.943		Nervous System Development R-HSA-9675108
-5.820		Axon Guidance R-HSA-422475
5.745		Complex I Biogenesis R-HSA-6799198
-5.623		Separation Of Sister Chromatids R-HSA-2467813
-5.457		MAPK Family Signaling Cascades R-HSA-5683057
-5.421		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
-5.361		MAPK1/MAPK3 Signaling R-HSA-5684996
-5.311		RAF/MAP Kinase Cascade R-HSA-5673001

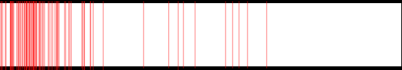



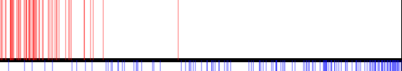
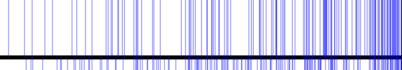

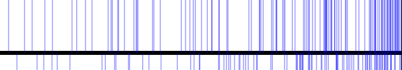
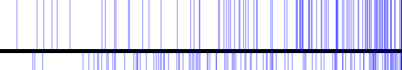
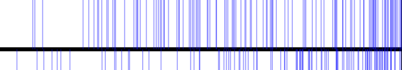
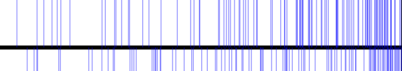
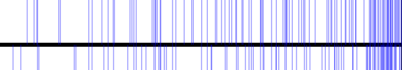
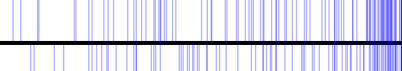
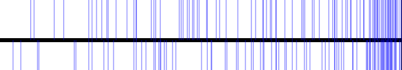

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=8$

Signal Transduction R-HSA-162582



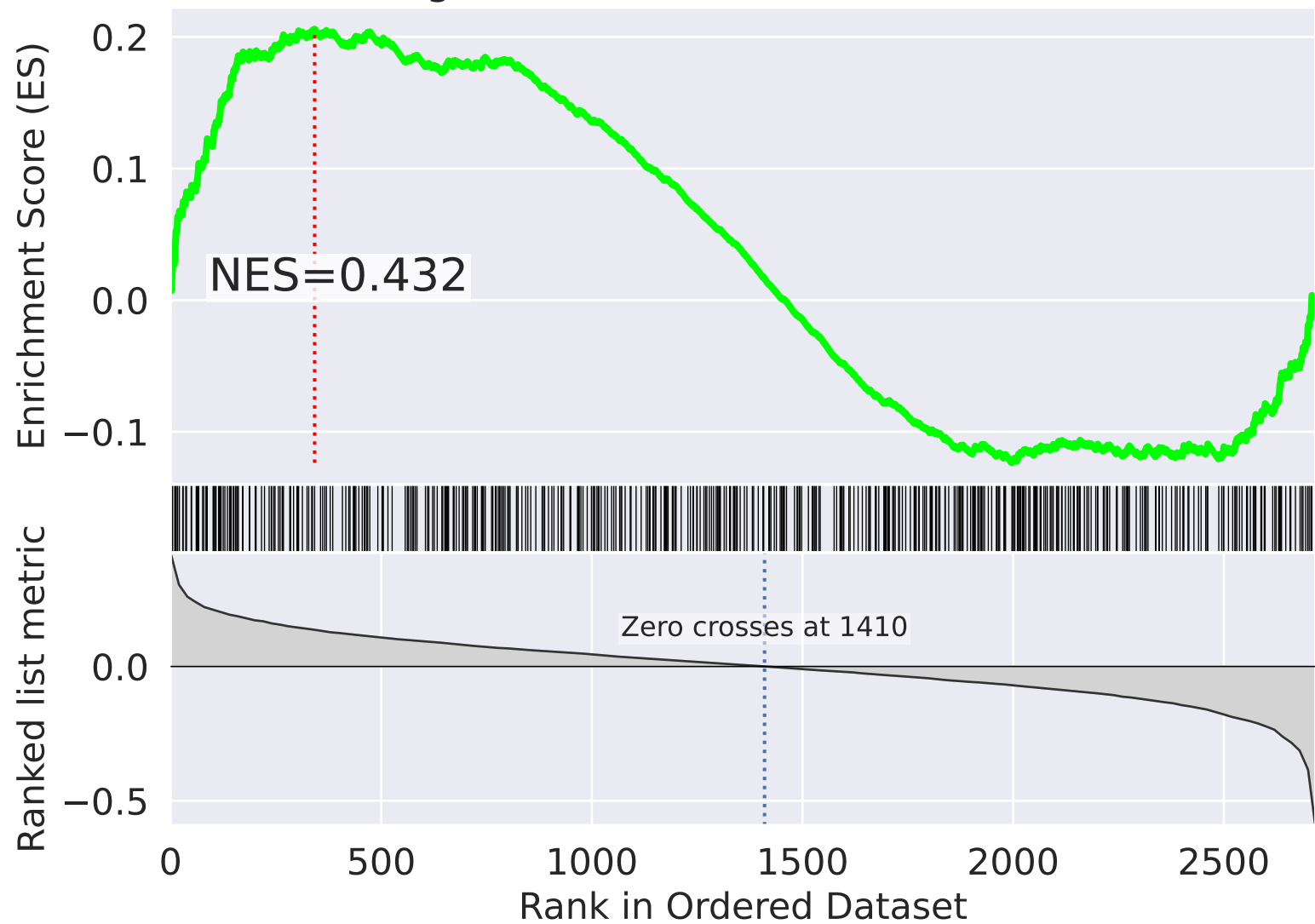
Signal Transduction R-HSA-162582



NES		SET
7.428		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
7.270		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
-6.895		M Phase R-HSA-68886
-6.701		Mitotic Metaphase And Anaphase R-HSA-2555396
6.688		Respiratory Electron Transport R-HSA-611105
-6.656		Mitotic Anaphase R-HSA-68882
-6.470		Adaptive Immune System R-HSA-1280218
-6.092		Separation Of Sister Chromatids R-HSA-2467813
-5.902		mRNA Splicing - Major Pathway R-HSA-72163
-5.892		Nervous System Development R-HSA-9675108
-5.879		mRNA Splicing R-HSA-72172
-5.860		S Phase R-HSA-69242
-5.854		Mitotic G2-G2/M Phases R-HSA-453274
-5.847		MAPK Family Signaling Cascades R-HSA-5683057
-5.844		G2/M Transition R-HSA-69275

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=9$

Signal Transduction R-HSA-162582



Signal Transduction R-HSA-162582

ES

0.2

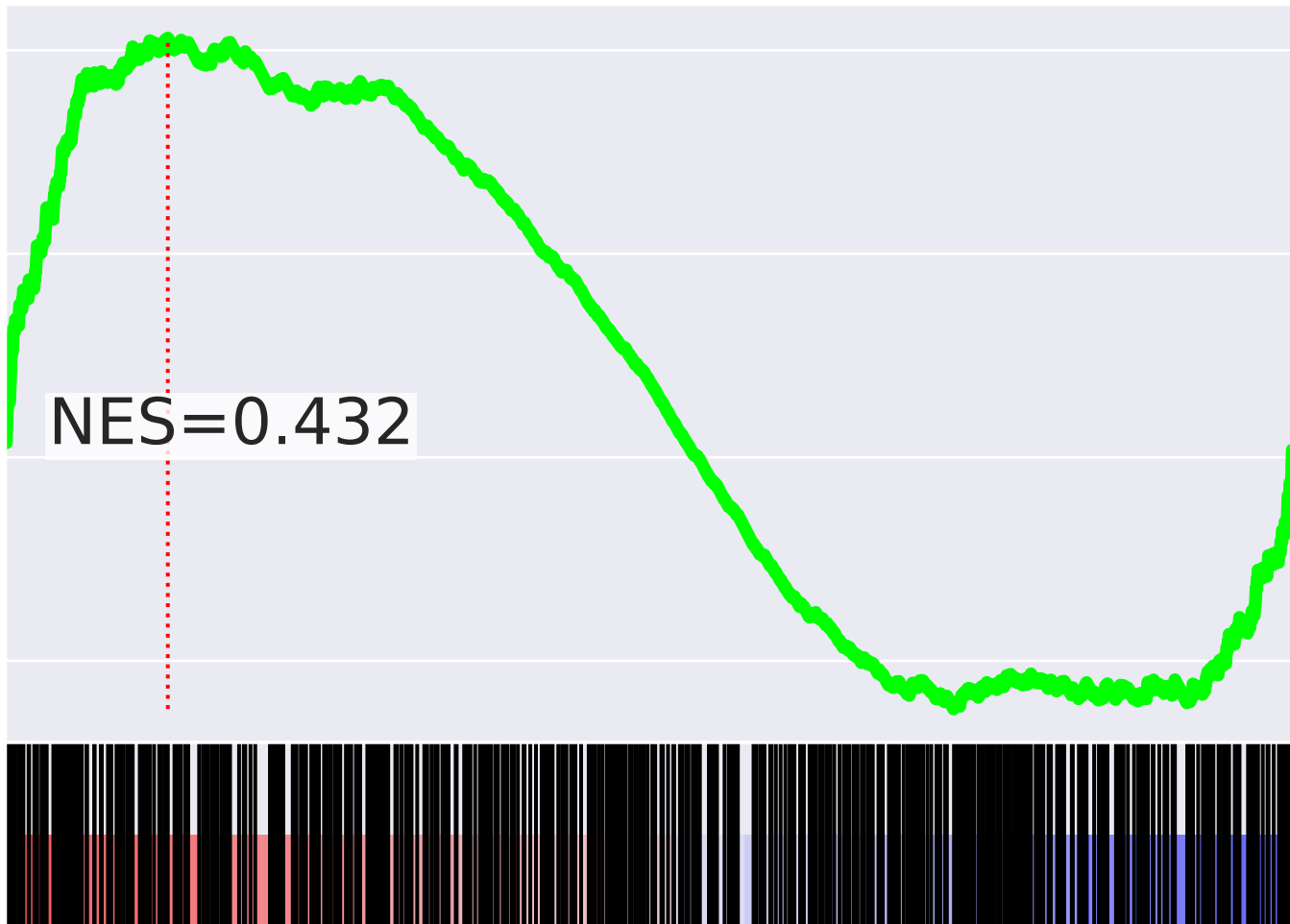
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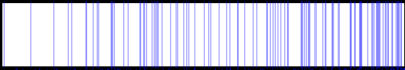
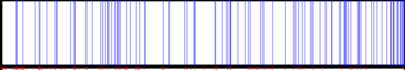
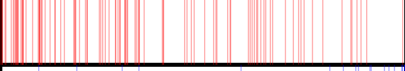

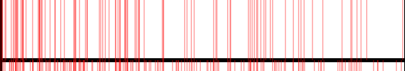
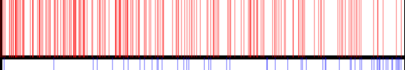
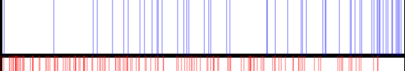
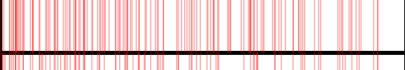
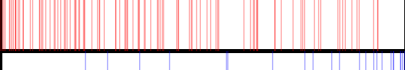
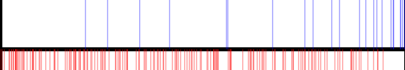
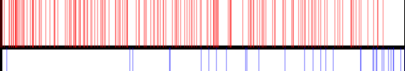
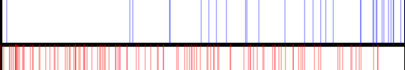
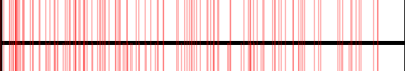
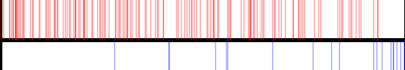

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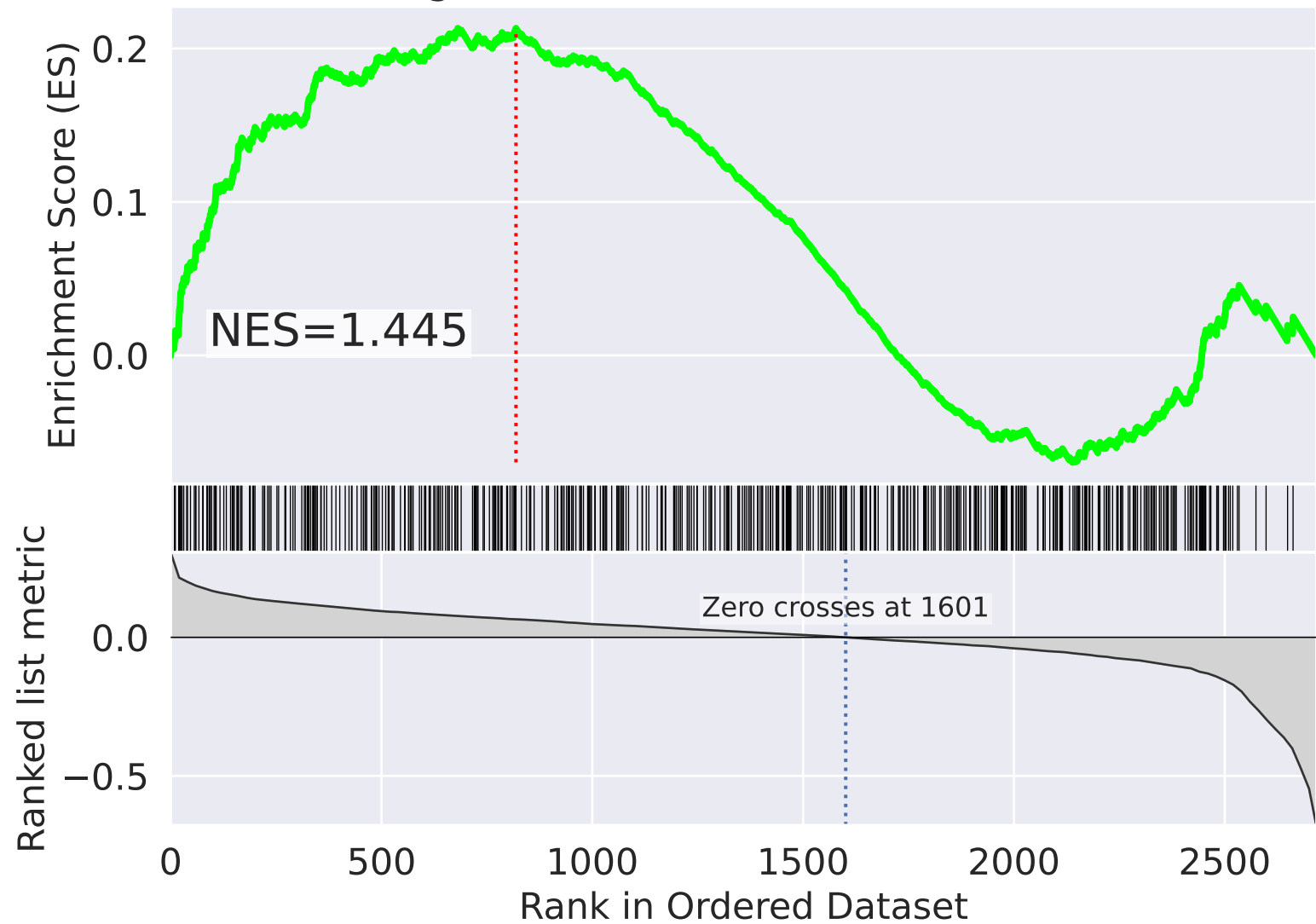
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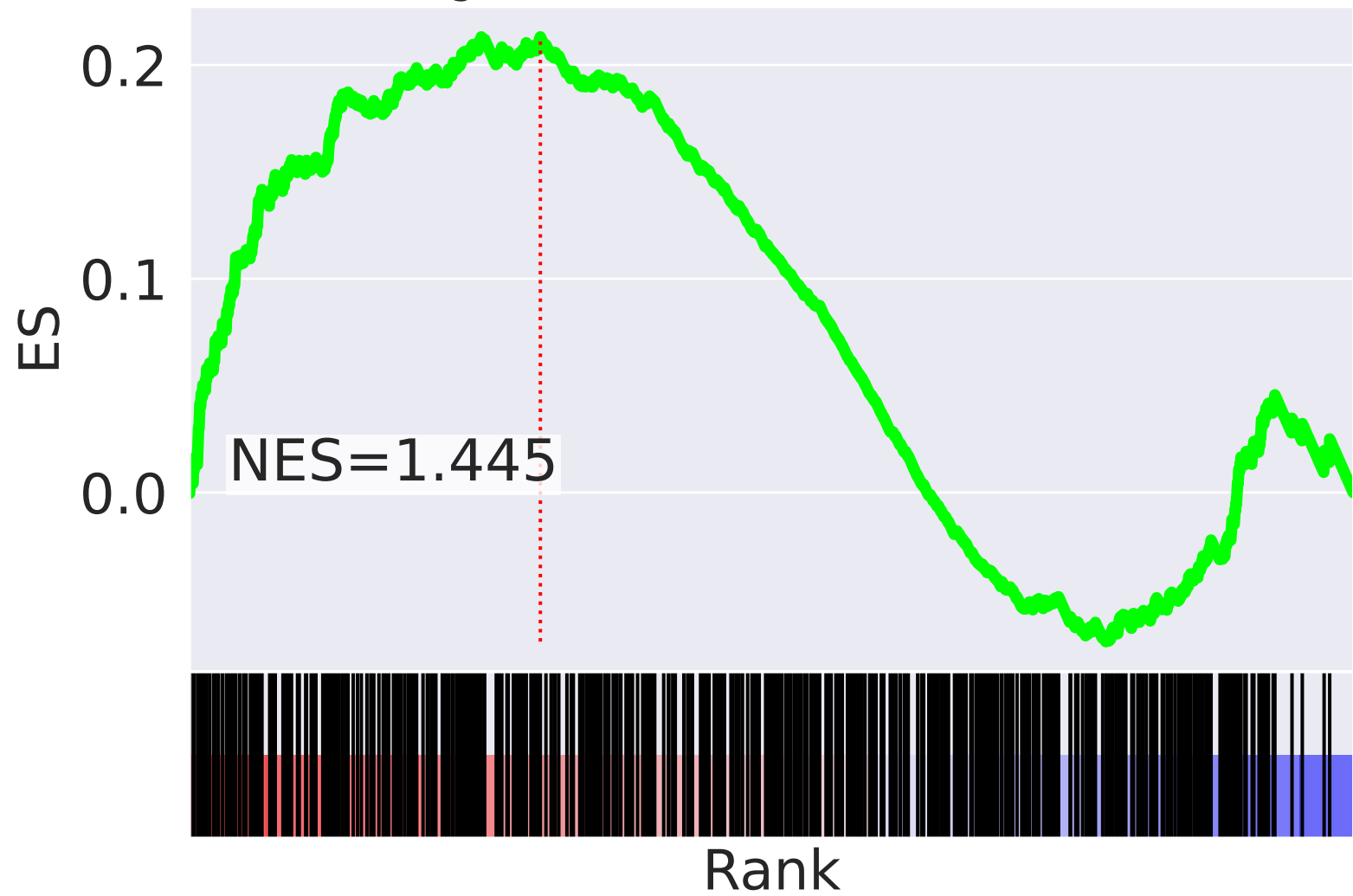
NES		SET
-5.080		Chromatin Modifying Enzymes R-HSA-3247509
-4.740		Transport Of Small Molecules R-HSA-382551
4.595		Mitotic G2-G2/M Phases R-HSA-453274
-4.474		Metabolism Of Nucleotides R-HSA-15869
4.445		G2/M Transition R-HSA-69275
4.391		M Phase R-HSA-68886
-4.141		HATs Acetylate Histones R-HSA-3214847
4.062		Mitotic Metaphase And Anaphase R-HSA-2555396
4.054		Mitotic Prometaphase R-HSA-68877
-4.024		Iron Uptake And Transport R-HSA-917937
3.984		Cell Cycle Checkpoints R-HSA-69620
-3.972		Amino Acids Regulate mTORC1 R-HSA-9639288
3.964		Separation Of Sister Chromatids R-HSA-2467813
3.962		Mitotic Anaphase R-HSA-68882
-3.943		Ion Channel Transport R-HSA-983712




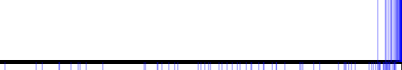
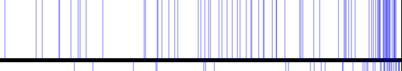
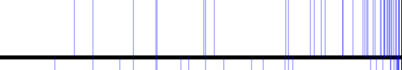

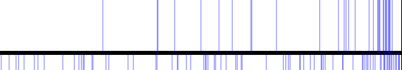
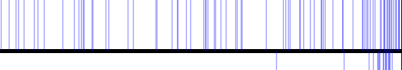
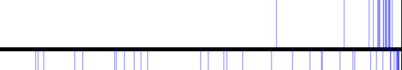
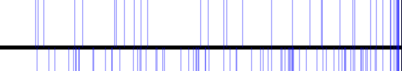
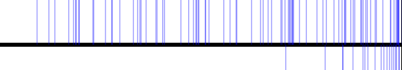



The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=10$

Signal Transduction R-HSA-162582



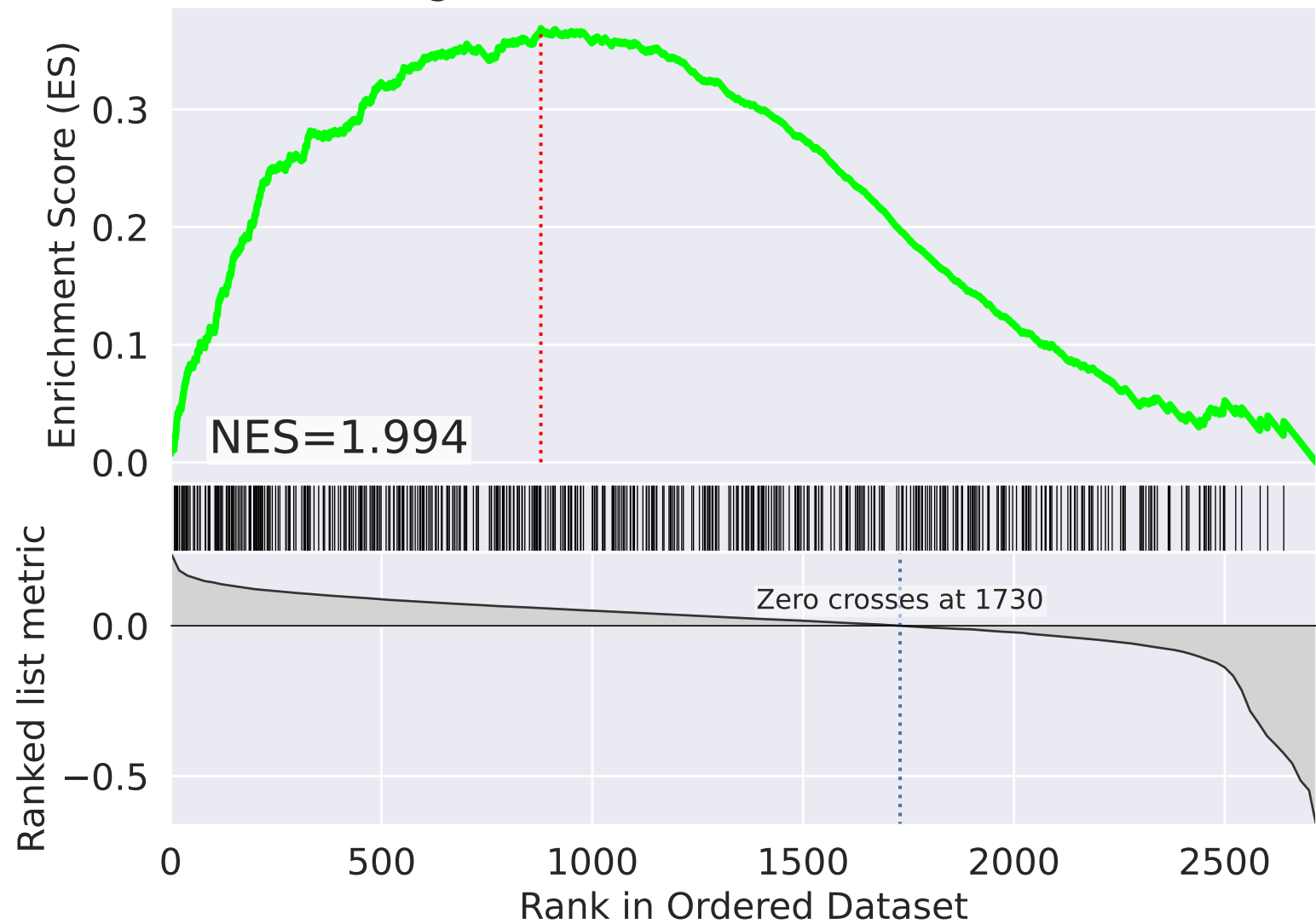
Signal Transduction R-HSA-162582



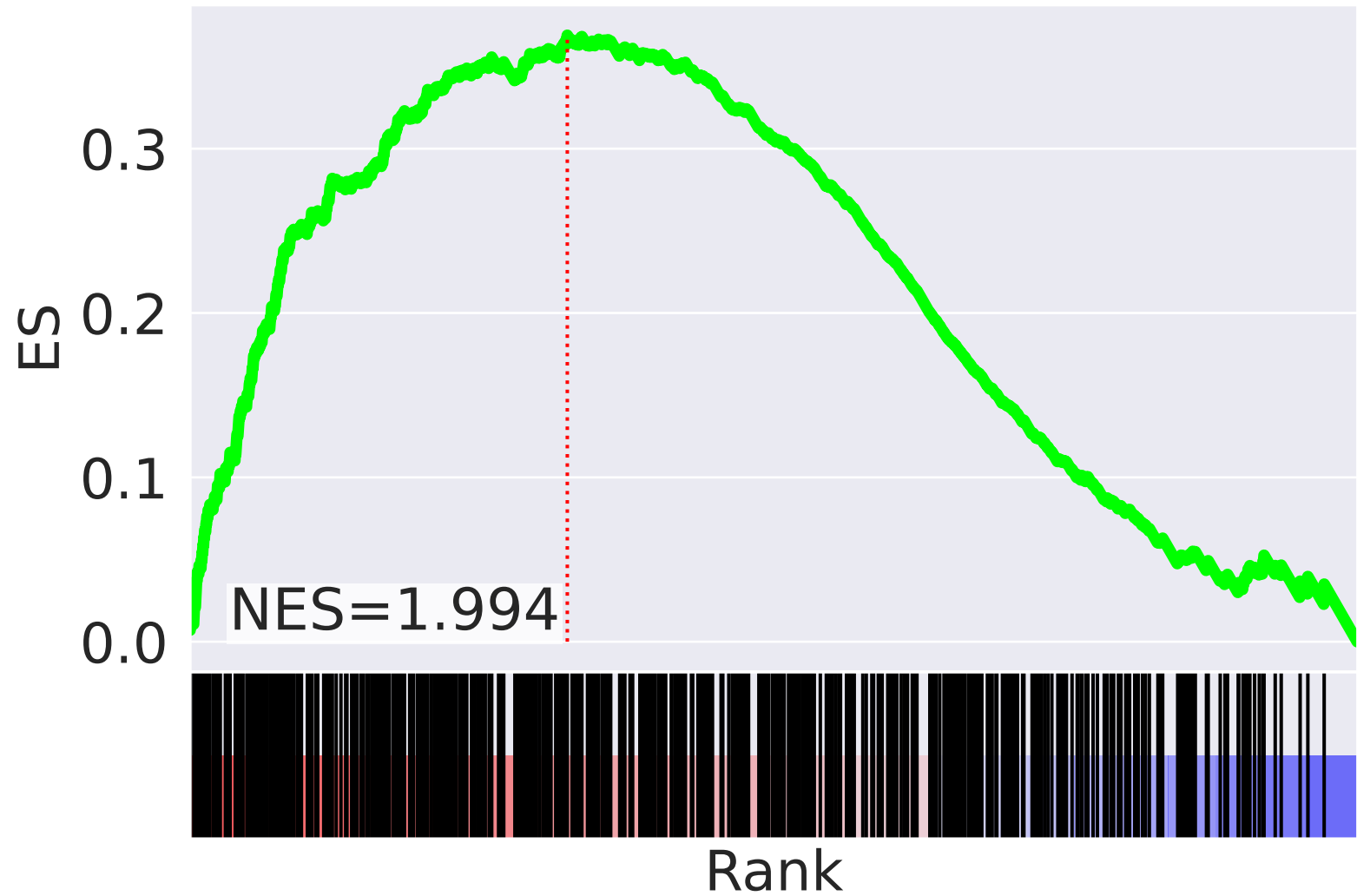
NES		SET
-6.600		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
-6.493		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
-6.098		Respiratory Electron Transport R-HSA-611105
-5.296		Complex I Biogenesis R-HSA-6799198
-4.574		Translation R-HSA-72766
-4.351		Mitochondrial Biogenesis R-HSA-1592230
-4.131		Cytoprotection By HMOX1 R-HSA-9707564
-4.008		tRNA Aminoacylation R-HSA-379724
-3.786		Organelle Biogenesis And Maintenance R-HSA-1852241
-3.777		Mitochondrial tRNA Aminoacylation R-HSA-379726
-3.775		TP53 Regulates Metabolic Genes R-HSA-5628897
-3.772		Cellular Response To Chemical Stress R-HSA-9711123
-3.557		Cristae Formation R-HSA-8949613
3.555		EPH-Ephrin Signaling R-HSA-2682334
3.521		Leishmania Infection R-HSA-9658195




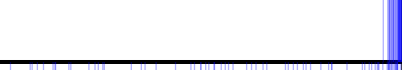
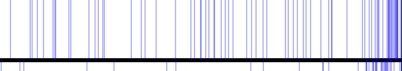
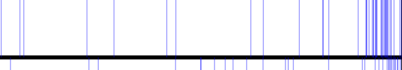
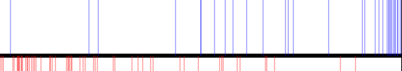
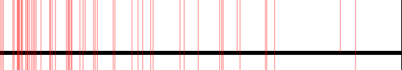
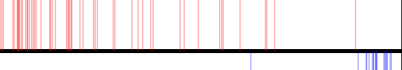

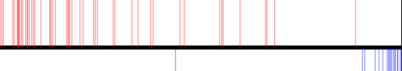
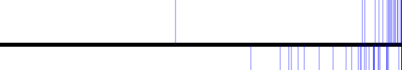
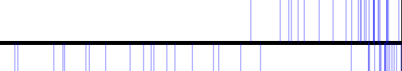
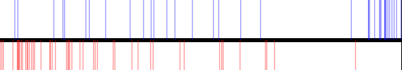

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=11$

Signal Transduction R-HSA-162582



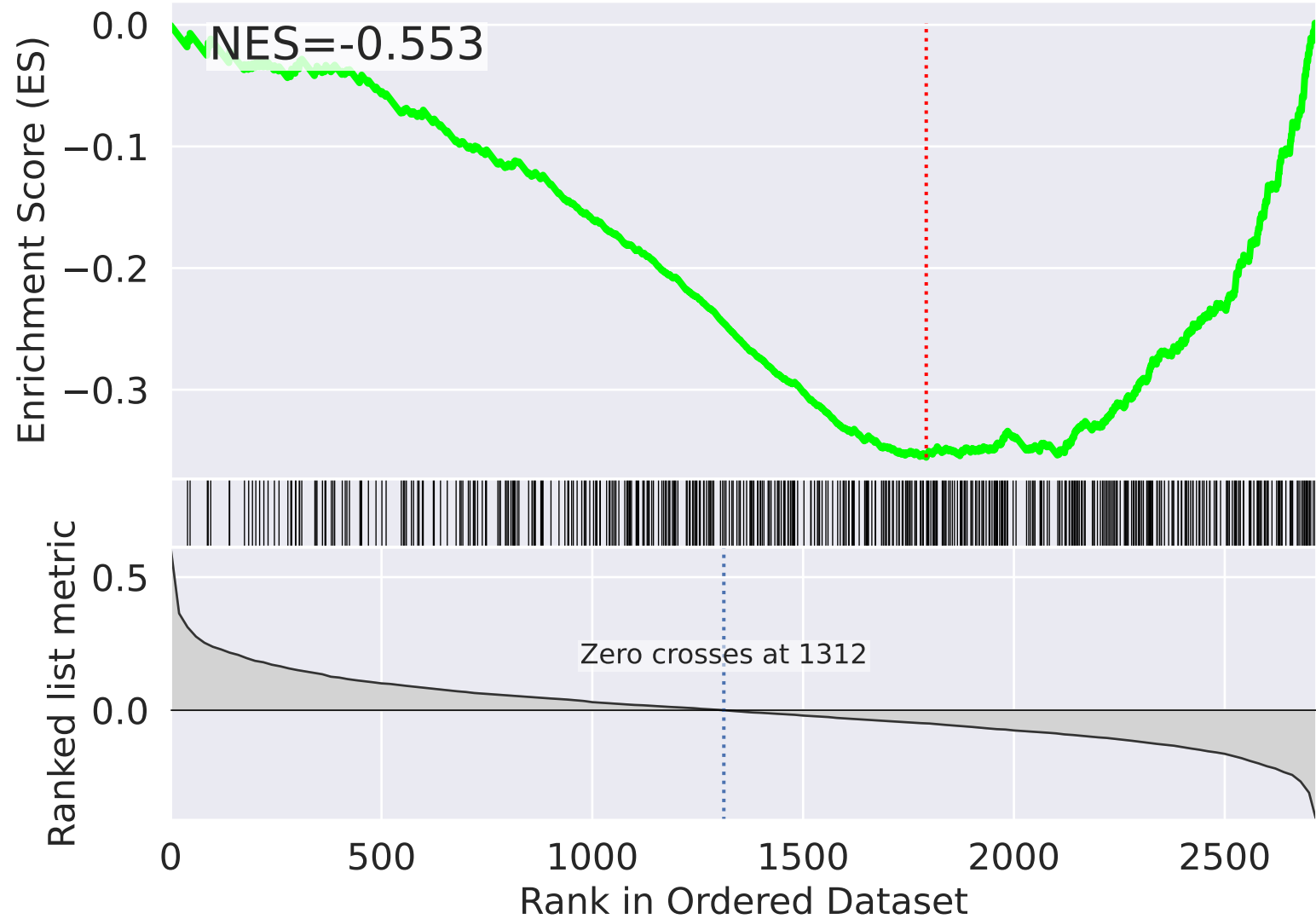
Signal Transduction R-HSA-162582



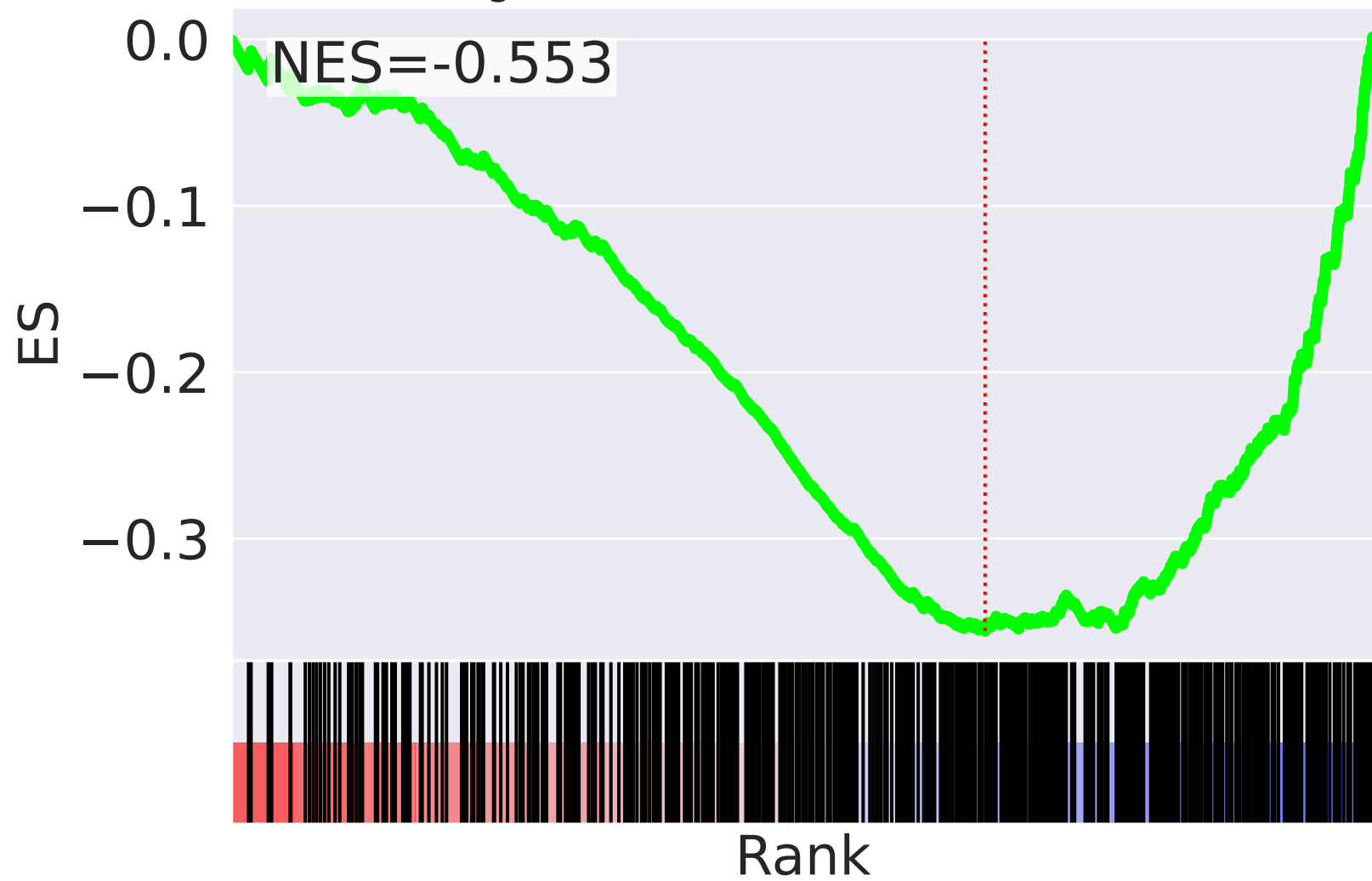
NES		SET
-5.399		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
-5.348		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
-5.131		Respiratory Electron Transport R-HSA-611105
-4.610		Complex I Biogenesis R-HSA-6799198
-3.908		Translation R-HSA-72766
-3.825		Mitochondrial Biogenesis R-HSA-1592230
-3.661		tRNA Aminoacylation R-HSA-379724
3.550		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
3.523		Regulation Of APC/C Activators Between G1/S And Early Anaphase R-HSA-176408
-3.506		Cristae Formation R-HSA-8949613
3.489		Activation Of APC/C And APC/C:Cdc20 Mediated Degradation Of Mitotic Proteins R-HSA-176814
-3.464		Mitochondrial tRNA Aminoacylation R-HSA-379726
-3.460		Mitochondrial Protein Import R-HSA-1268020
-3.442		TP53 Regulates Metabolic Genes R-HSA-5628897
3.440		APC/C:Cdc20 Mediated Degradation Of Mitotic Proteins R-HSA-176409

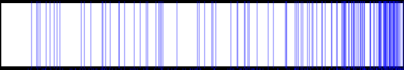
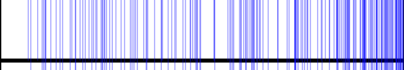
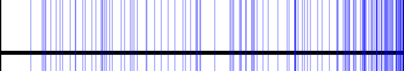
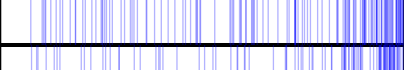

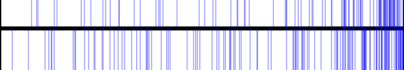
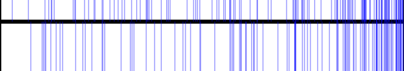
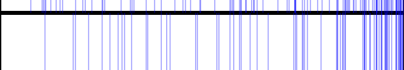

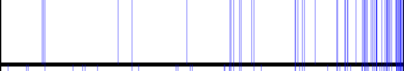
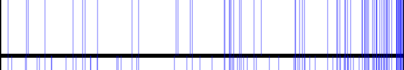
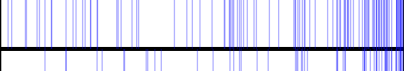



The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=12$

Signal Transduction R-HSA-162582



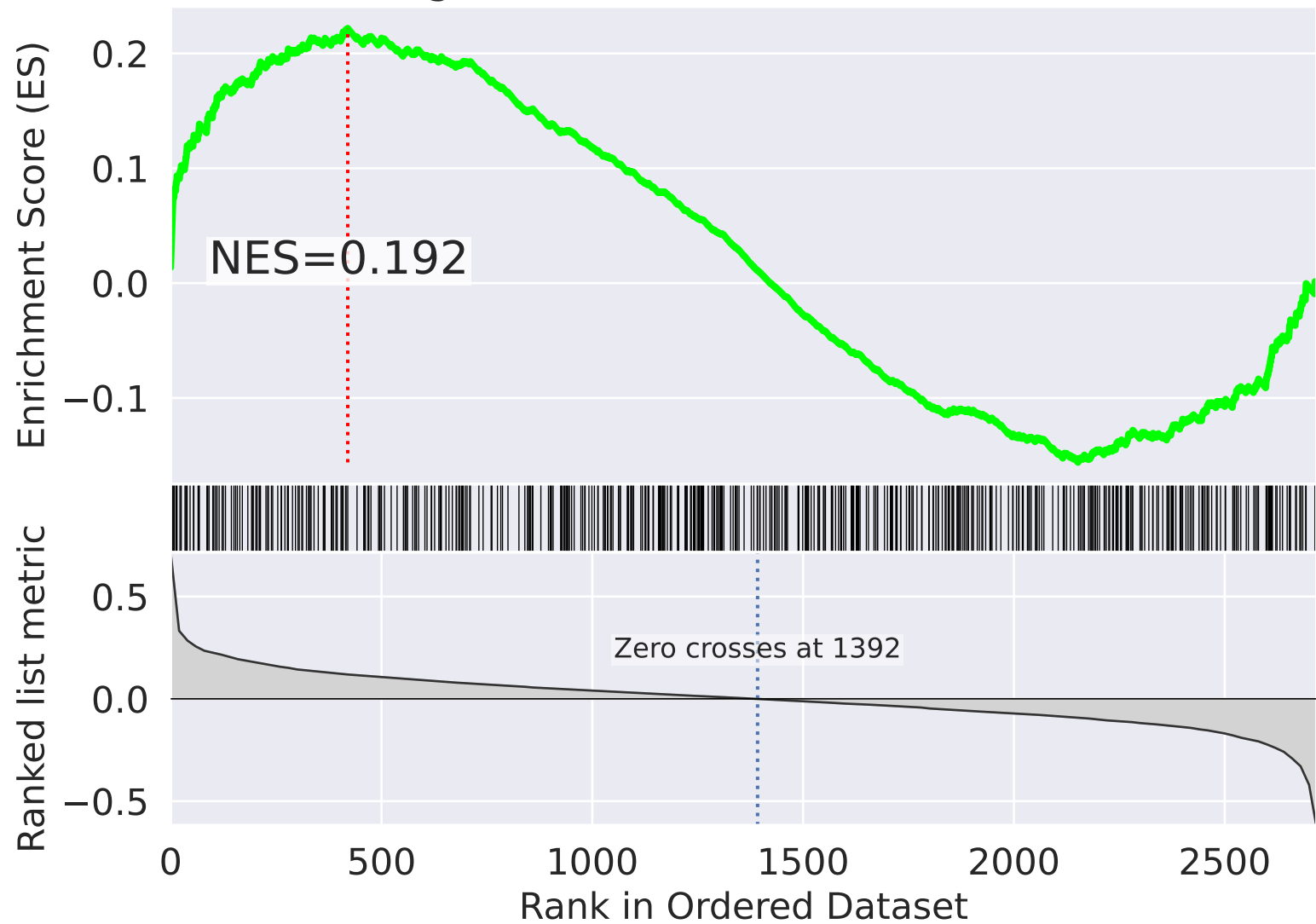
Signal Transduction R-HSA-162582



NES		SET
-7.519		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
-7.331		M Phase R-HSA-68886
-7.226		Mitotic Metaphase And Anaphase R-HSA-2555396
-7.169		Mitotic Anaphase R-HSA-68882
-7.126		mRNA Splicing R-HSA-72172
-7.046		mRNA Splicing - Major Pathway R-HSA-72163
-6.928		HIV Infection R-HSA-162906
-6.696		Separation Of Sister Chromatids R-HSA-2467813
-6.245		Host Interactions Of HIV Factors R-HSA-162909
-6.015		Regulation Of APC/C Activators Between G1/S And Early Anaphase R-HSA-176408
-6.009		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
-5.930		DNA Replication Pre-Initiation R-HSA-69002
-5.859		S Phase R-HSA-69242
-5.859		Disorders Of Transmembrane Transporters R-HSA-5619115
-5.821		Activation Of APC/C And APC/C:Cdc20 Mediated Degradation Of Mitotic Proteins R-HSA-176814

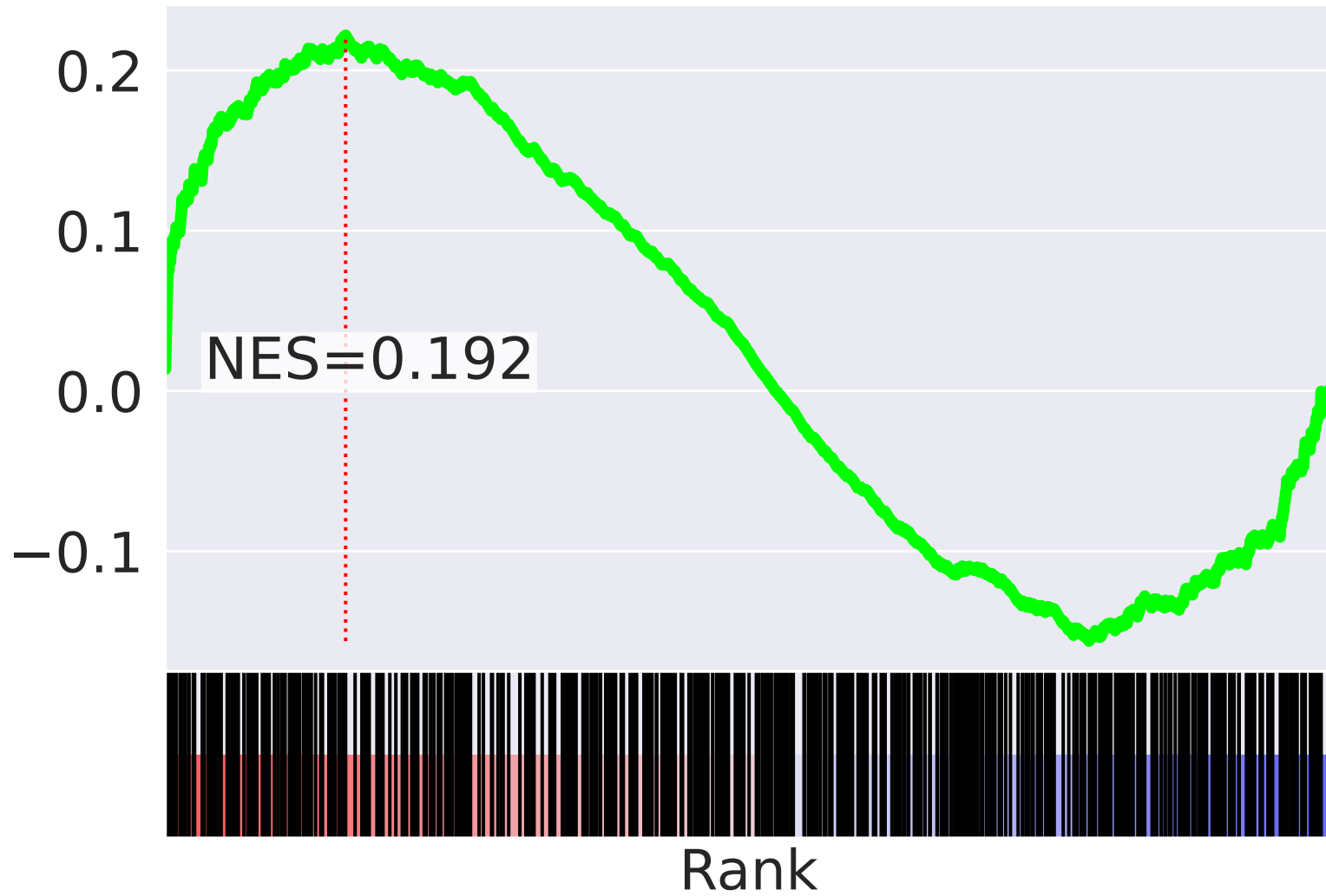
The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=13$

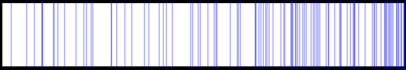

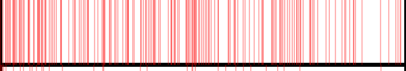
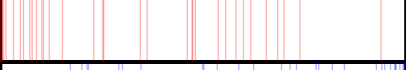
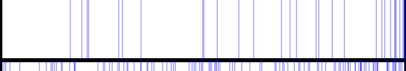
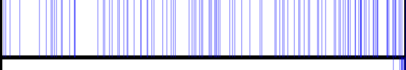

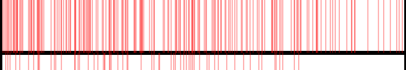
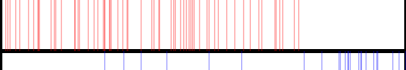
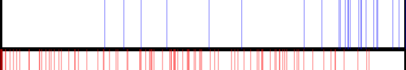
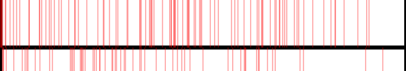
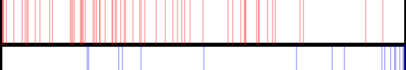
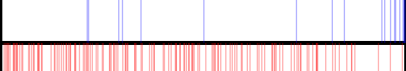
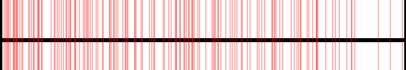

Signal Transduction R-HSA-162582



Signal Transduction R-HSA-162582

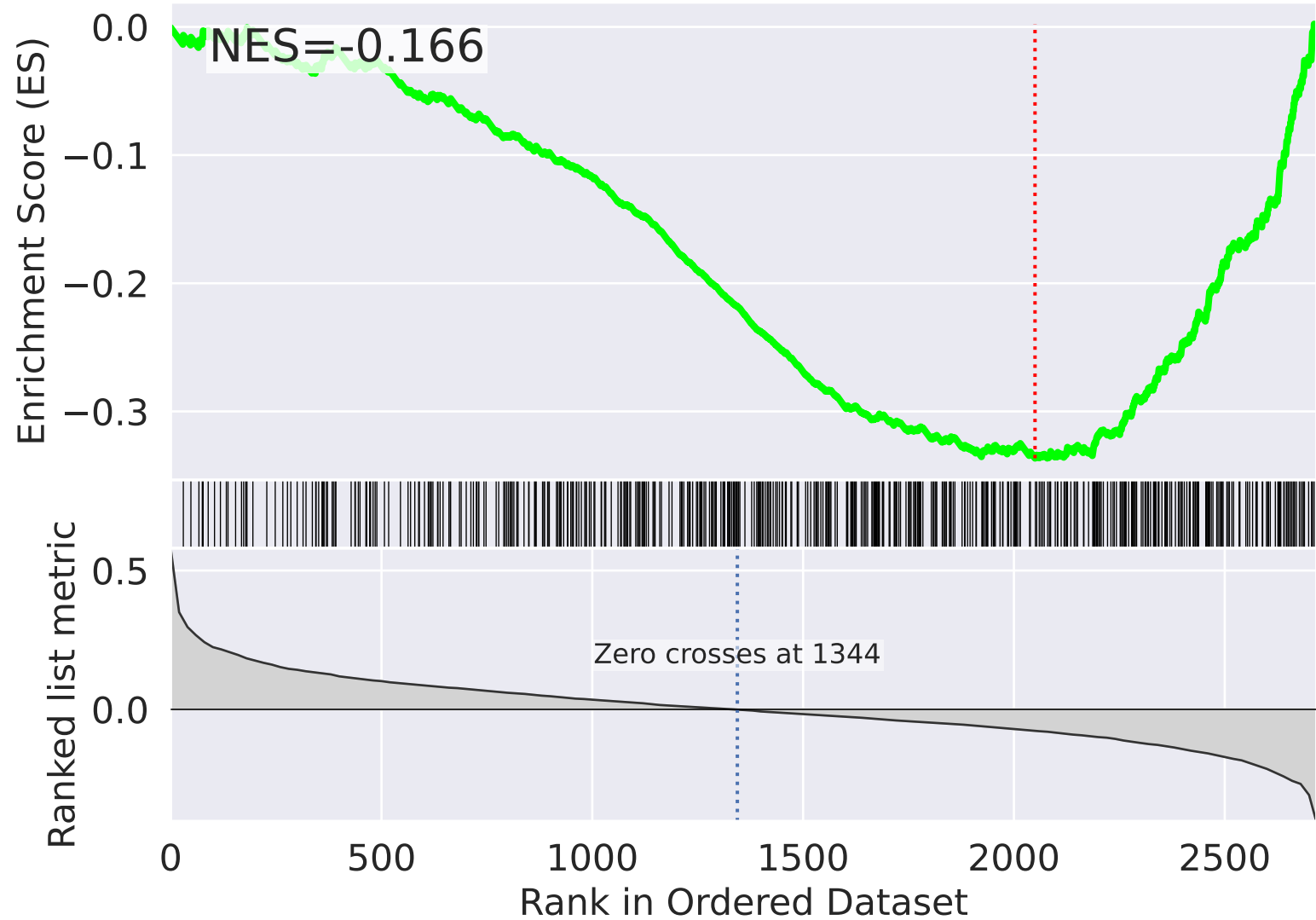
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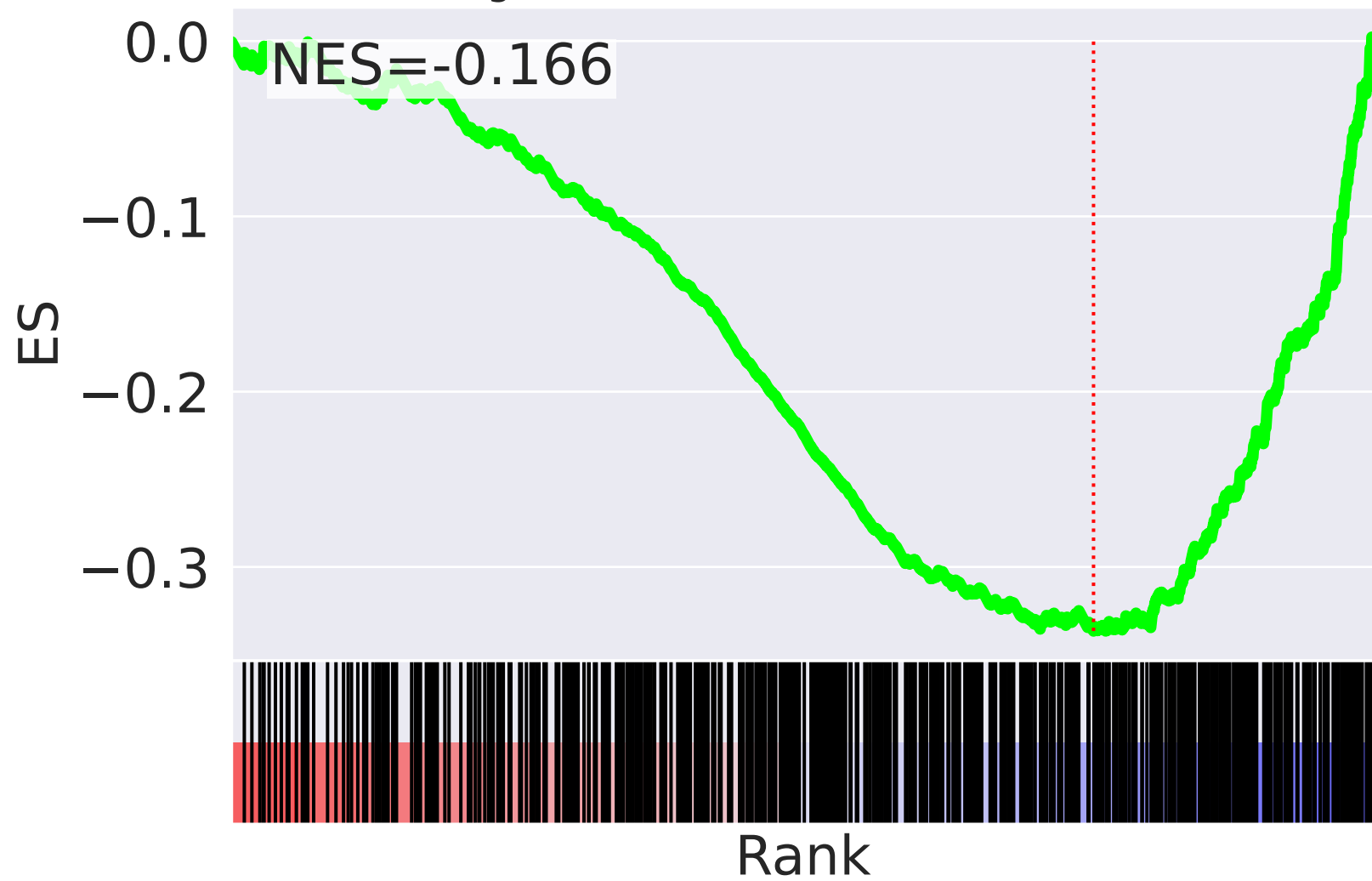
NES		SET
-4.655		Chromatin Modifying Enzymes R-HSA-3247509
-4.577		Metabolism Of Nucleotides R-HSA-15869
4.175		Adaptive Immune System R-HSA-1280218
4.164		Leishmania Infection R-HSA-9658195
-4.106		Metabolism Of Vitamins And Cofactors R-HSA-196854
-3.985		Transport Of Small Molecules R-HSA-382551
-3.932		Nucleotide Biosynthesis R-HSA-8956320
3.925		M Phase R-HSA-68886
3.920		Switching Of Origins To A Post-Replicative State R-HSA-69052
-3.882		Iron Uptake And Transport R-HSA-917937
3.806		MAPK Family Signaling Cascades R-HSA-5683057
3.764		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
-3.763		Metabolism Of Water-Soluble Vitamins And Cofactors R-HSA-196849
3.747		Mitotic Metaphase And Anaphase R-HSA-2555396
3.675		Mitotic Anaphase R-HSA-68882


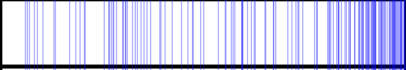
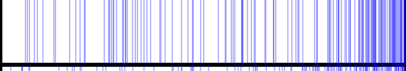
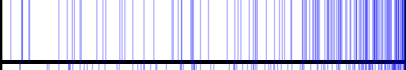
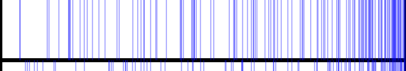
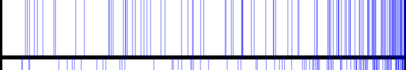

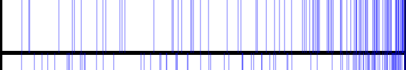
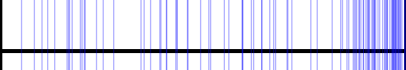
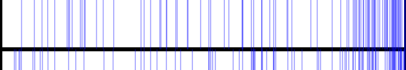
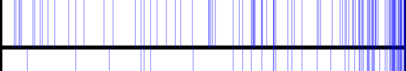
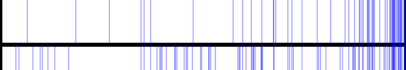
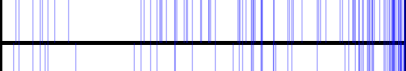
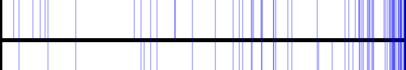

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=14$

Signal Transduction R-HSA-162582



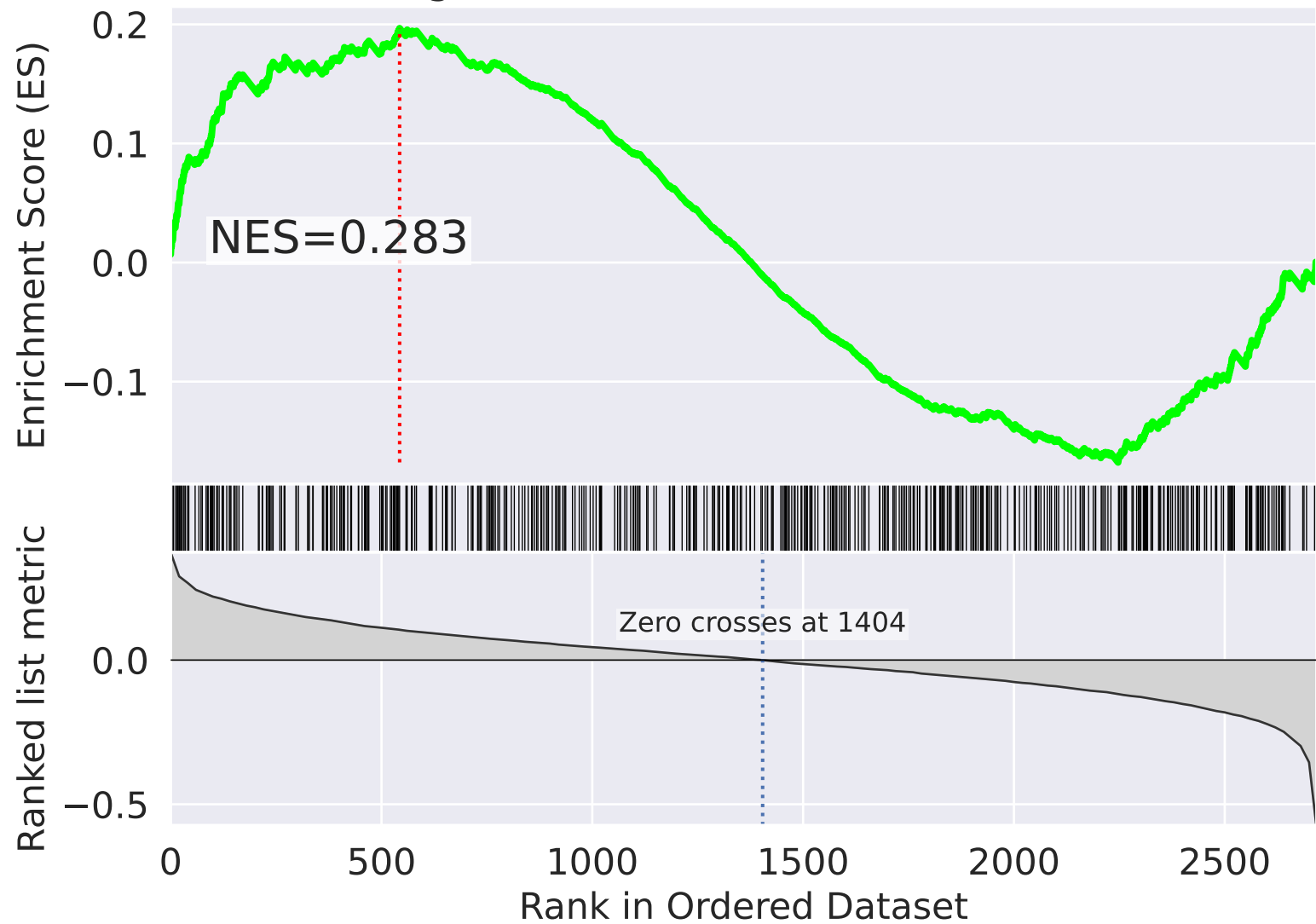
Signal Transduction R-HSA-162582



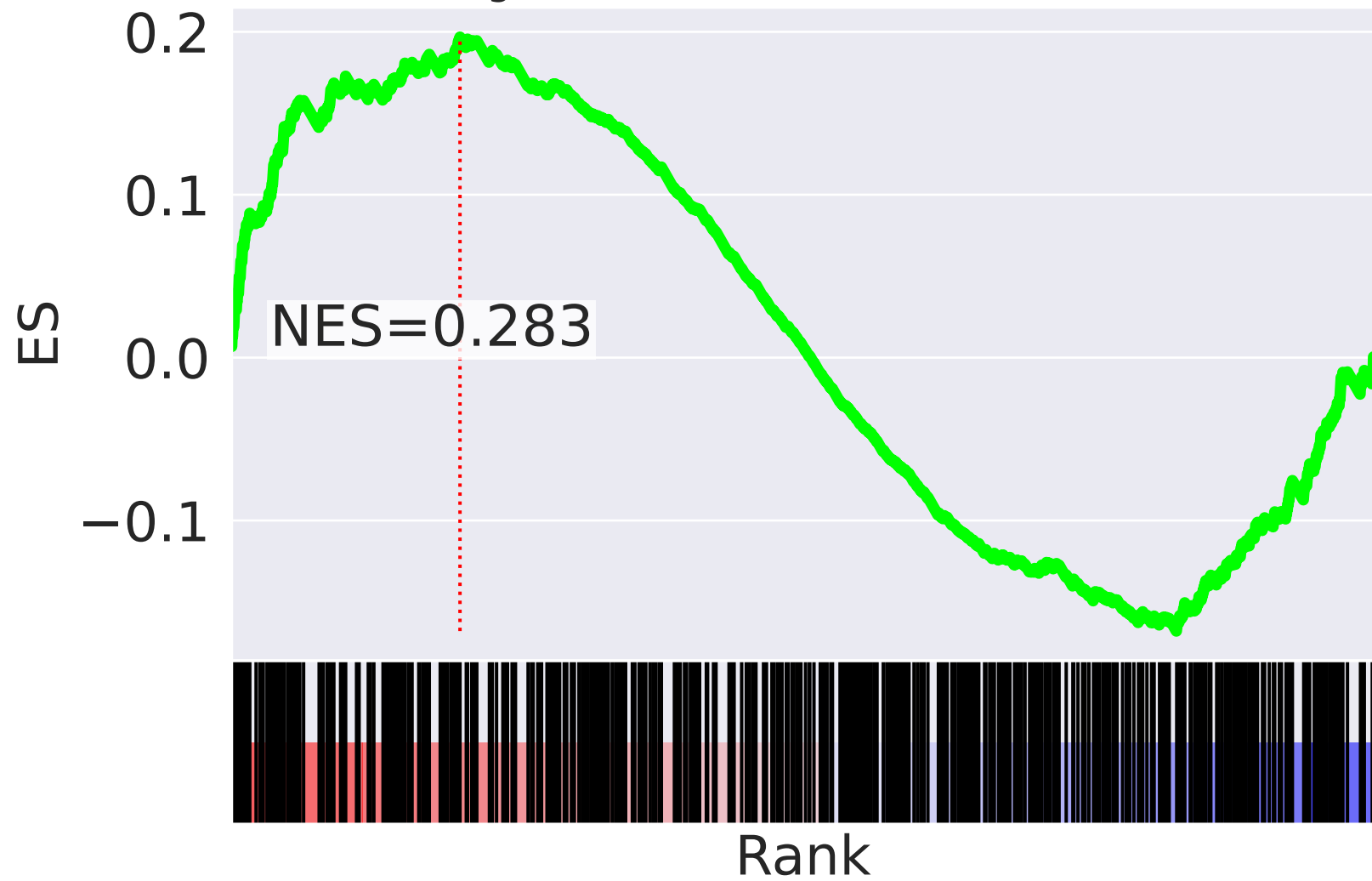
NES		SET
-8.011		M Phase R-HSA-68886
-7.536		Mitotic Metaphase And Anaphase R-HSA-2555396
-7.481		Mitotic Anaphase R-HSA-68882
-7.338		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
-7.261		HIV Infection R-HSA-162906
-7.139		Separation Of Sister Chromatids R-HSA-2467813
-6.925		mRNA Splicing R-HSA-72172
-6.881		mRNA Splicing - Major Pathway R-HSA-72163
-6.802		Mitotic G2-G2/M Phases R-HSA-453274
-6.780		G2/M Transition R-HSA-69275
-6.642		S Phase R-HSA-69242
-6.553		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
-6.511		Mitotic G1 Phase And G1/S Transition R-HSA-453279
-6.467		DNA Replication Pre-Initiation R-HSA-69002
-6.399		Switching Of Origins To A Post-Replicative State R-HSA-69052

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=15$

Signal Transduction R-HSA-162582

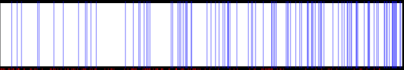
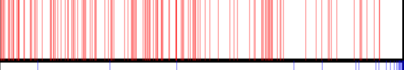
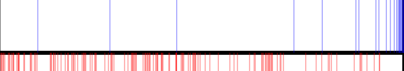
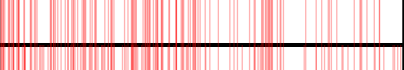
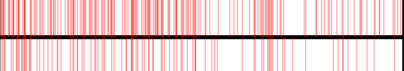
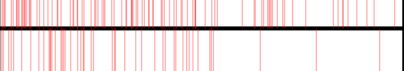
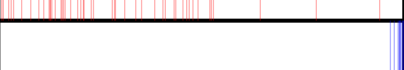
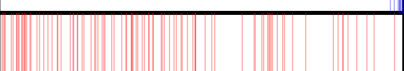
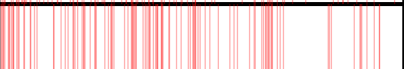
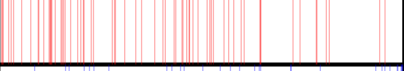
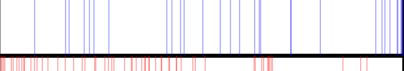
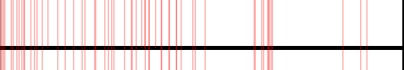
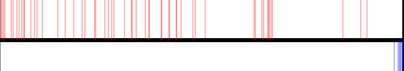
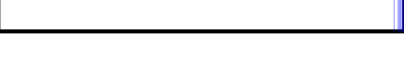



Signal Transduction R-HSA-162582



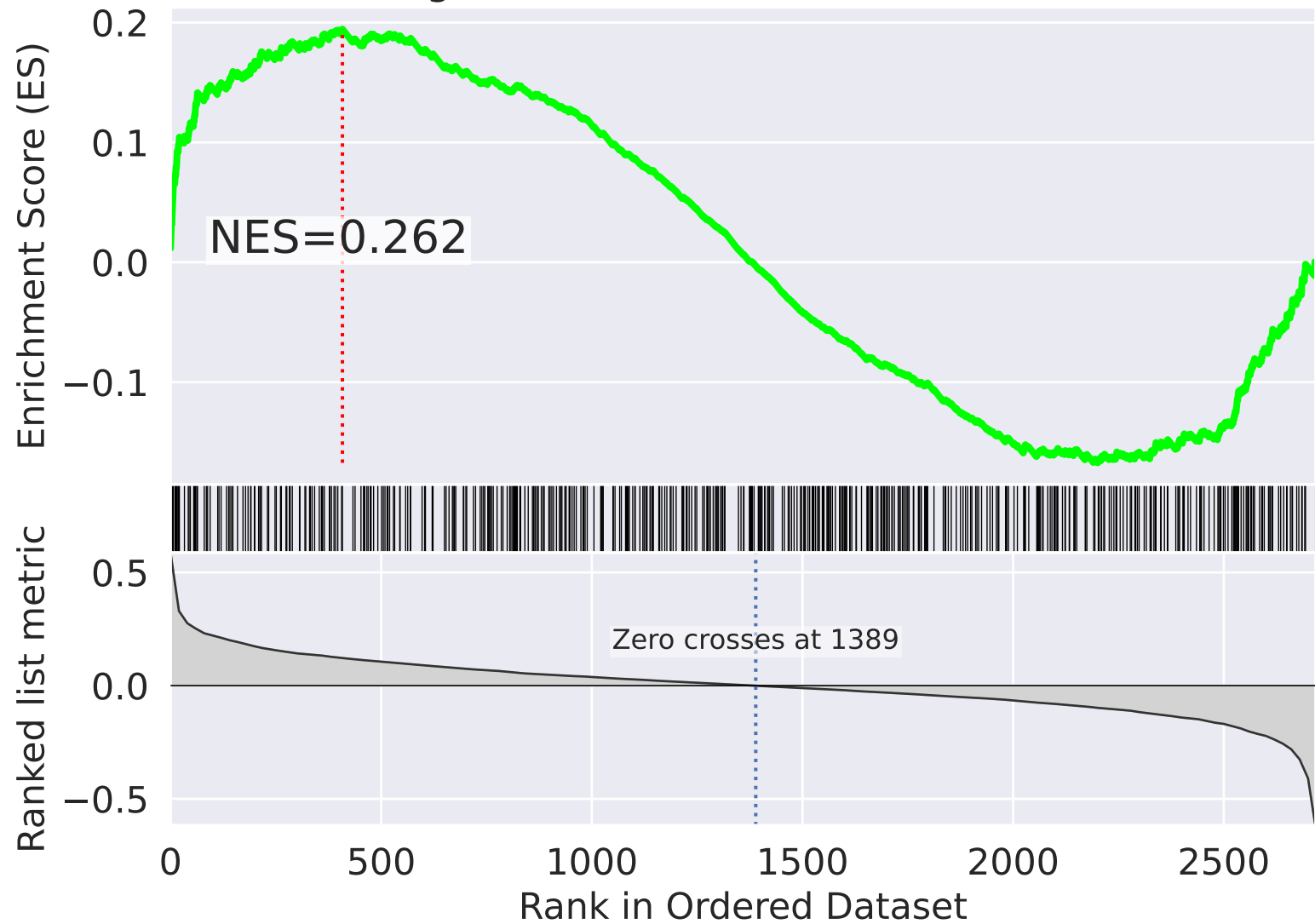
NES

SET

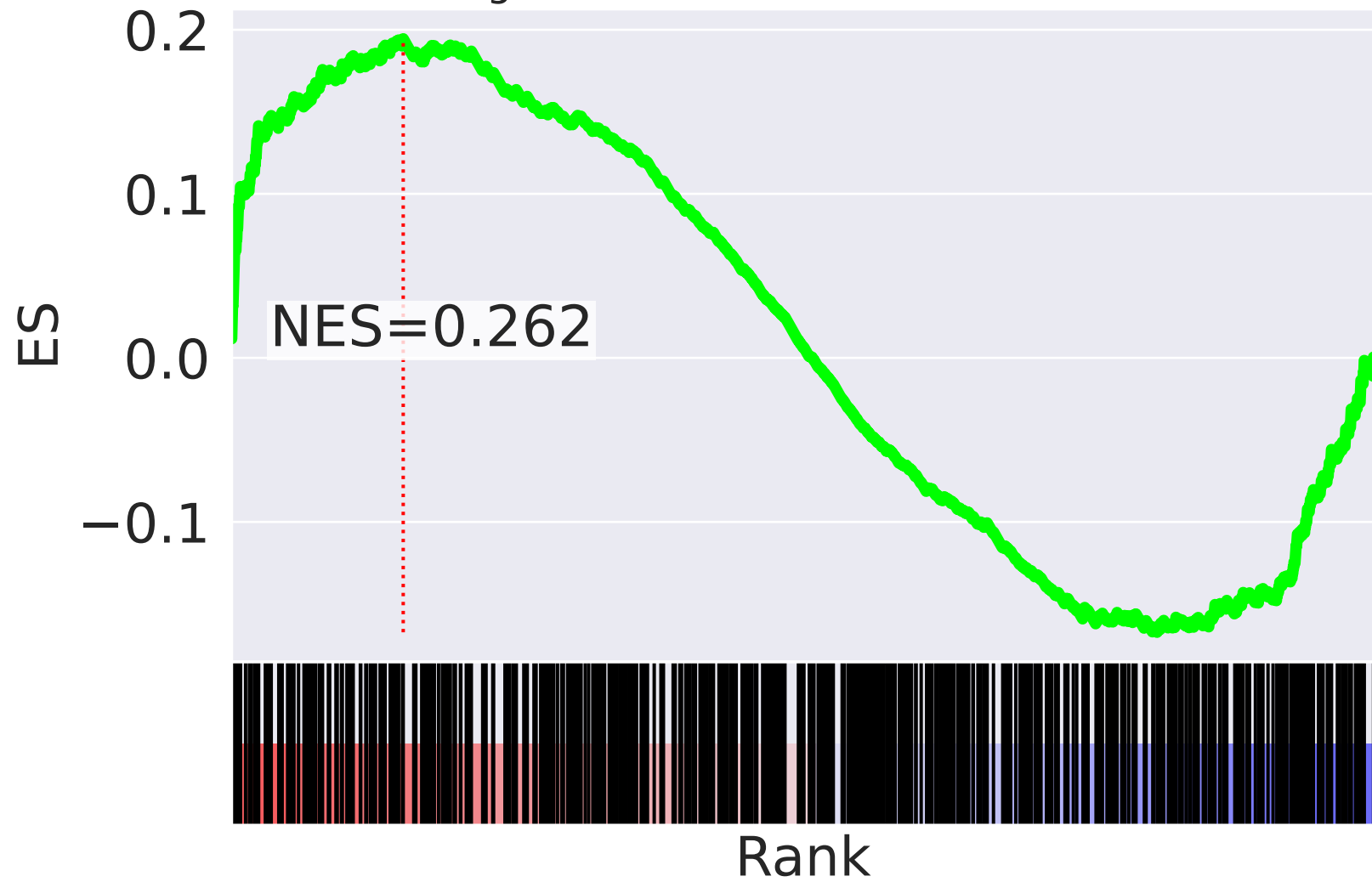
-5.064		Chromatin Modifying Enzymes R-HSA-3247509
4.873		Mitotic Metaphase And Anaphase R-HSA-2555396
-4.803		Metabolism Of Nucleotides R-HSA-15869
4.786		Mitotic Anaphase R-HSA-68882
4.266		M Phase R-HSA-68886
4.237		Mitotic G2-G2/M Phases R-HSA-453274
4.133		Golgi-to-ER Retrograde Transport R-HSA-8856688
-4.101		Nucleotide Biosynthesis R-HSA-8956320
4.096		G2/M Transition R-HSA-69275
4.092		Separation Of Sister Chromatids R-HSA-2467813
4.054		Intra-Golgi And Retrograde Golgi-to-ER Traffic R-HSA-6811442
-3.915		Metabolism Of Vitamins And Cofactors R-HSA-196854
3.871		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
3.859		Regulation Of APC/C Activators Between G1/S And Early Anaphase R-HSA-176408
-3.841		Purine Ribonucleoside Monophosphate Biosynthesis R-HSA-73817

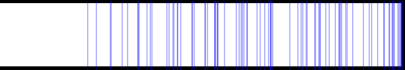
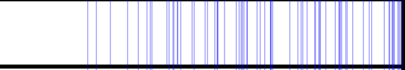
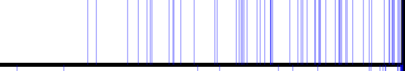
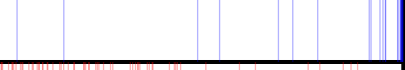
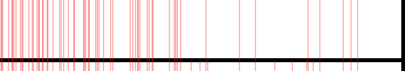
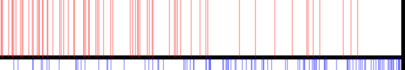
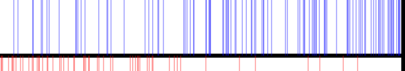
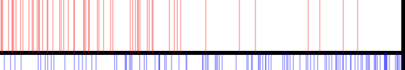
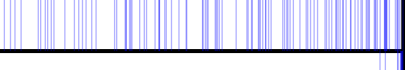
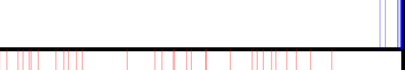
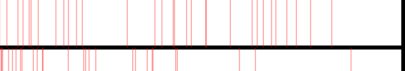
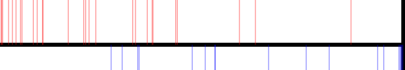

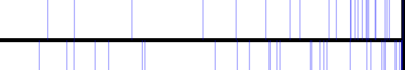

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=16$

Signal Transduction R-HSA-162582



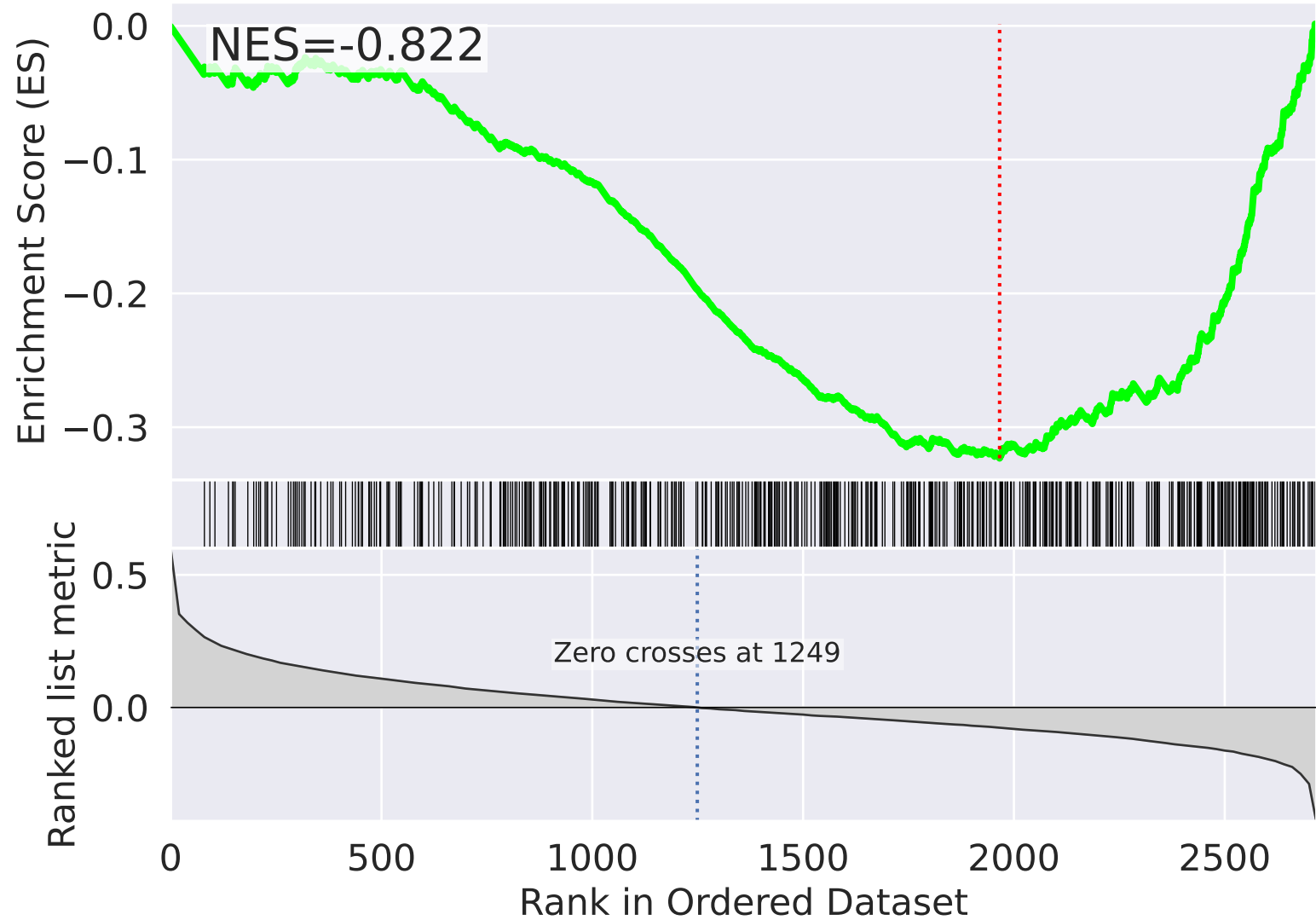
Signal Transduction R-HSA-162582



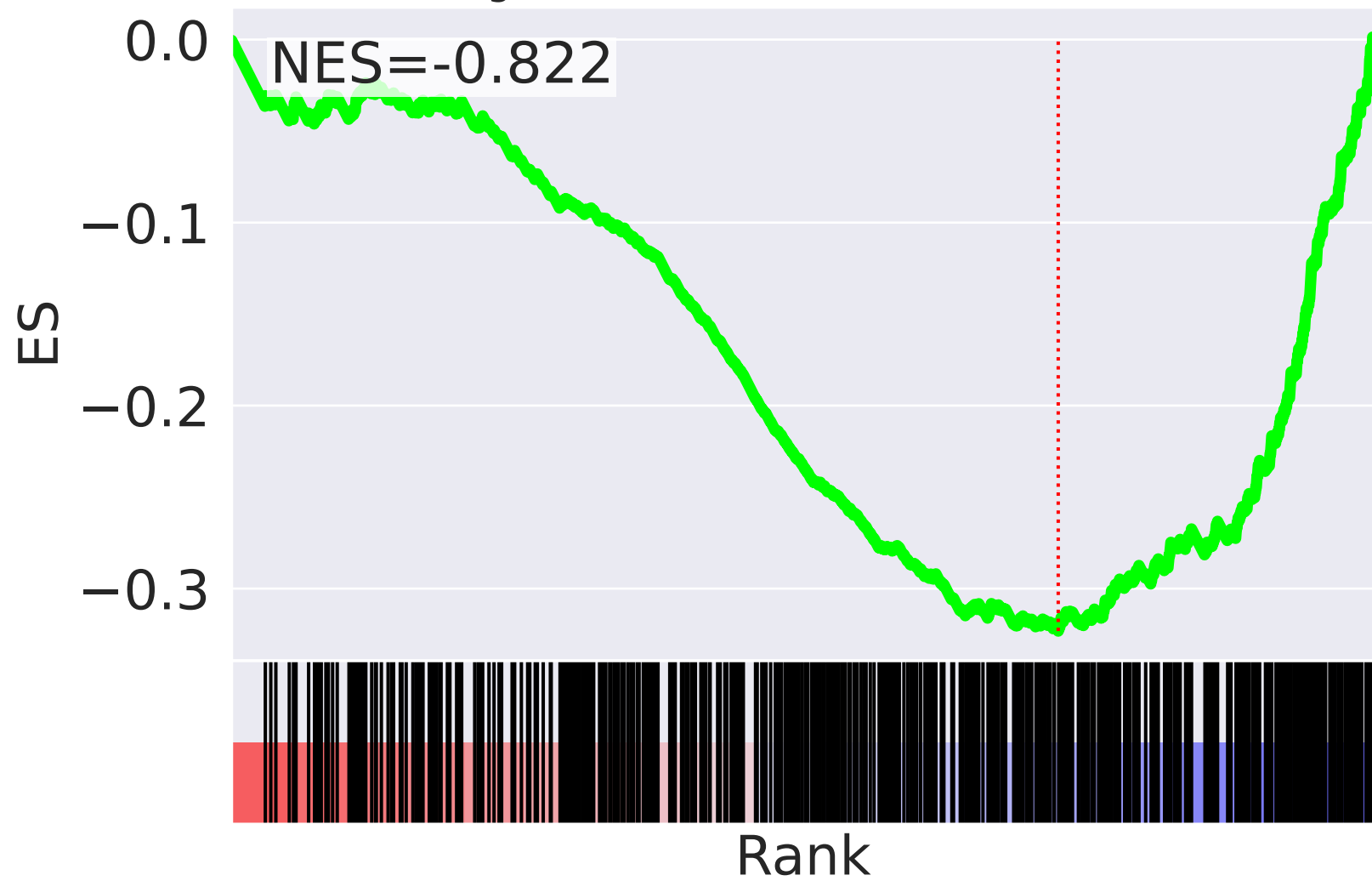
NES		SET
-5.345		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
-5.010		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
-4.723		Respiratory Electron Transport R-HSA-611105
-4.689		Metabolism Of Nucleotides R-HSA-15869
4.667		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
4.642		rRNA Processing R-HSA-72312
-4.534		Chromatin Modifying Enzymes R-HSA-3247509
4.426		Major Pathway Of rRNA Processing In Nucleolus And Cytosol R-HSA-6791226
-4.066		Transport Of Small Molecules R-HSA-382551
-3.796		Nucleotide Biosynthesis R-HSA-8956320
3.769		Leishmania Infection R-HSA-9658195
3.693		rRNA Modification In Nucleus And Cytosol R-HSA-6790901
-3.675		Pyruvate Metabolism And Citric Acid (TCA) Cycle R-HSA-71406
-3.629		Iron Uptake And Transport R-HSA-917937
-3.572		Metabolism Of Vitamins And Cofactors R-HSA-196854

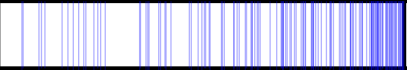
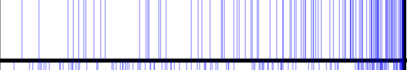
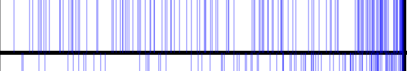
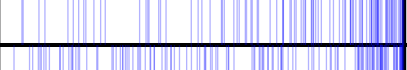
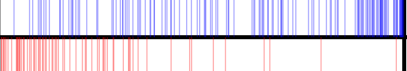

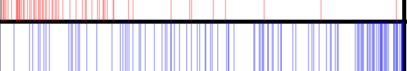
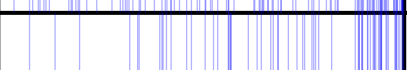

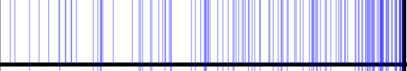
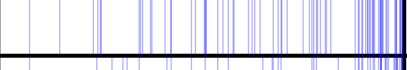




The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=17$

Signal Transduction R-HSA-162582



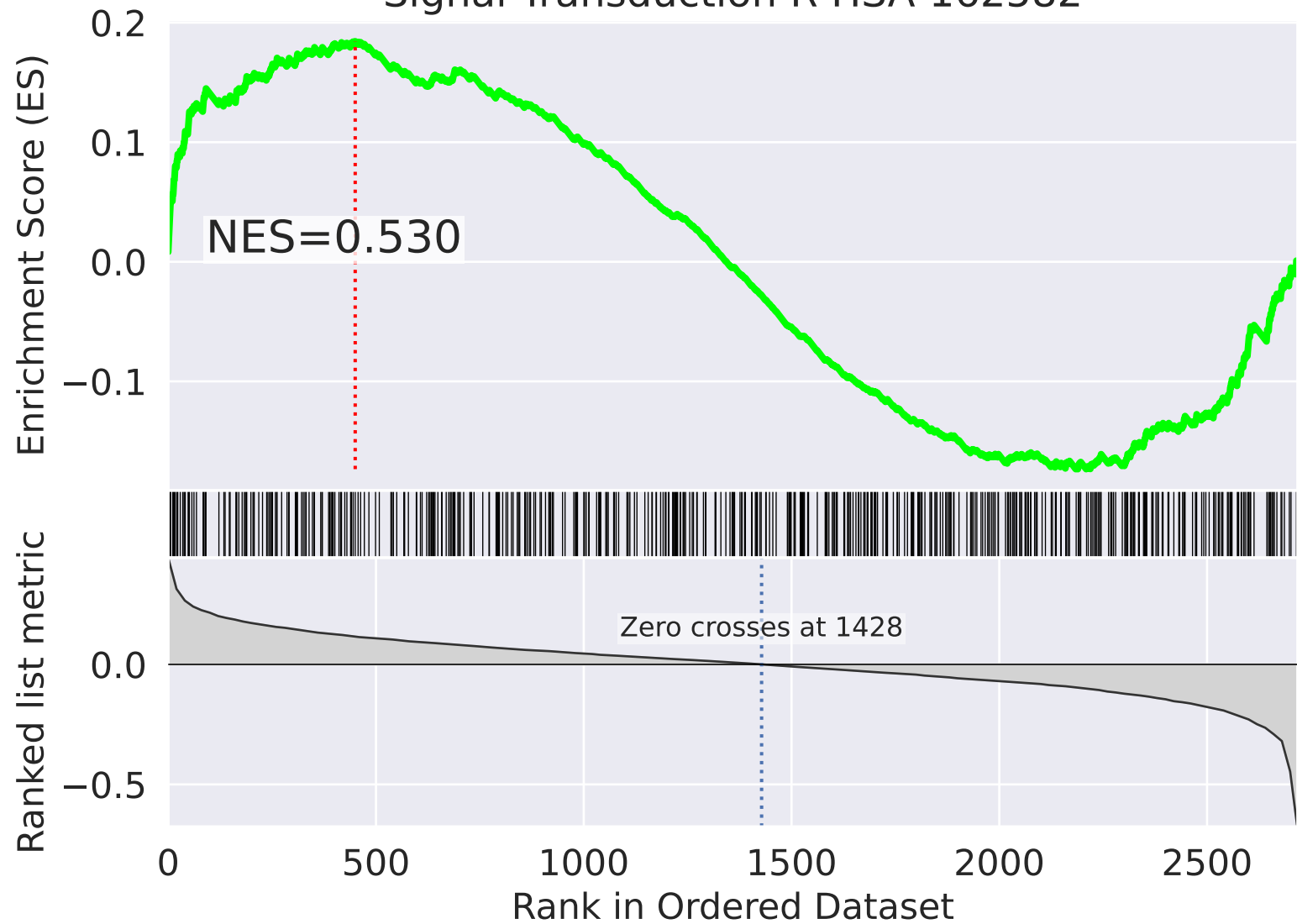
Signal Transduction R-HSA-162582



NES		SET
-6.275		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
-6.231		mRNA Splicing - Major Pathway R-HSA-72163
-6.088		Mitotic Anaphase R-HSA-68882
-6.071		mRNA Splicing R-HSA-72172
-6.036		Mitotic Metaphase And Anaphase R-HSA-2555396
5.864		rRNA Processing R-HSA-72312
5.783		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
-5.748		Separation Of Sister Chromatids R-HSA-2467813
-5.697		TCF Dependent Signaling In Response To WNT R-HSA-201681
-5.663		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
-5.639		HIV Infection R-HSA-162906
-5.587		Host Interactions Of HIV Factors R-HSA-162909
-5.529		APC/C:Cdh1 Mediated Degradation Of Cdc20 And APC/C:Cdh1 Targets In Late Mitosis/Early G1 R-HSA-174178
-5.508		Activation Of APC/C And APC/C:Cdc20 Mediated Degradation Of Mitotic Proteins R-HSA-176814
-5.481		Regulation Of APC/C Activators Between G1/S And Early Anaphase R-HSA-176408

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=18$

Signal Transduction R-HSA-162582



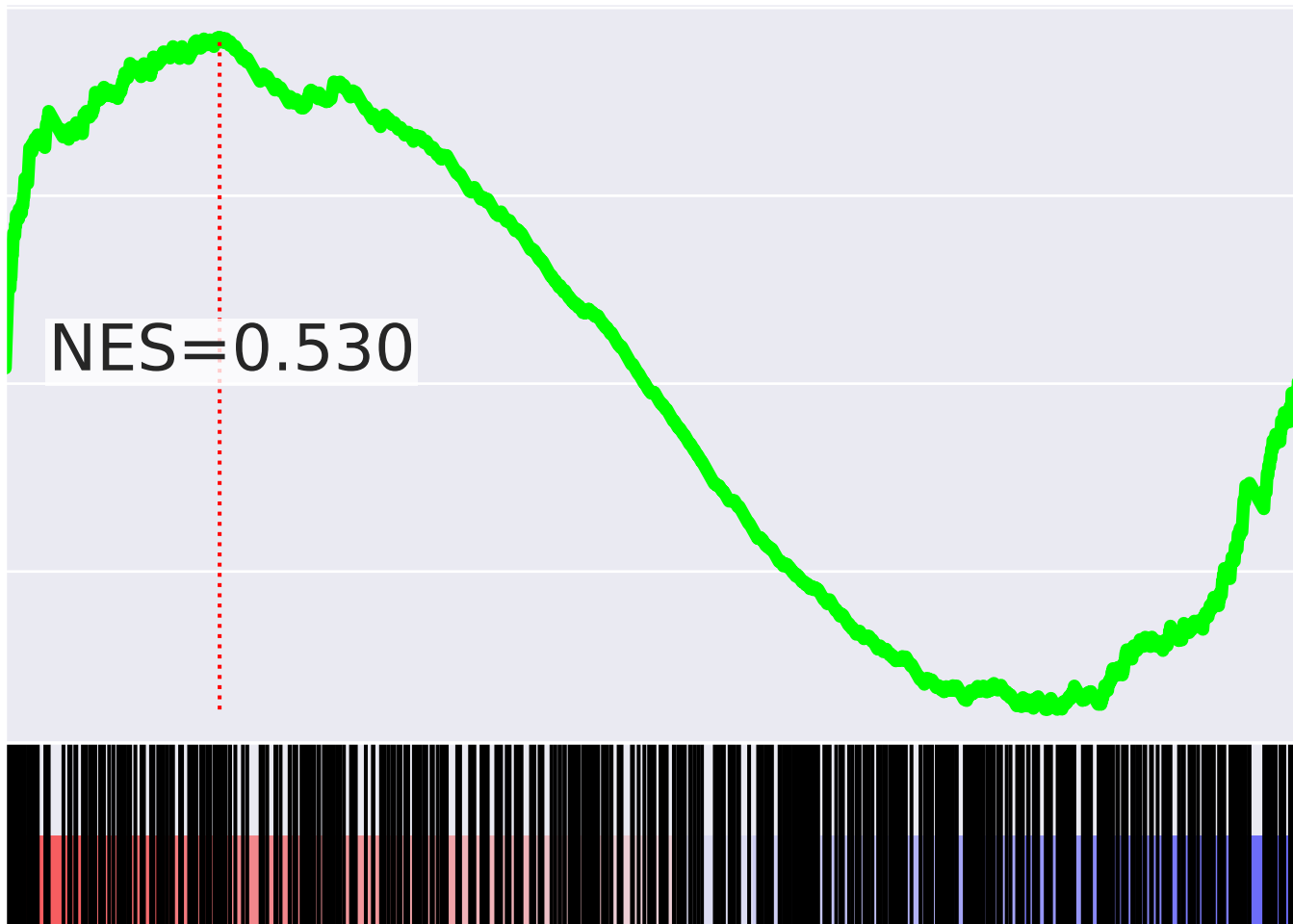
Signal Transduction R-HSA-162582


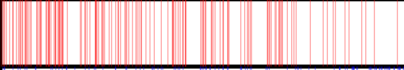
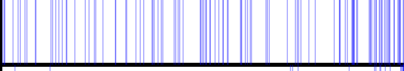

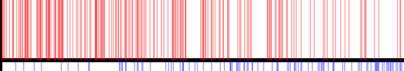
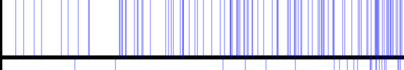
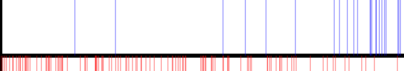
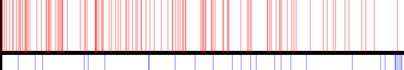


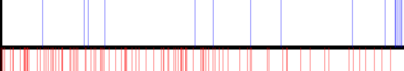
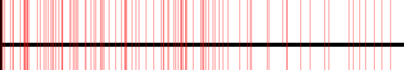

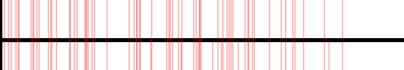

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0.0
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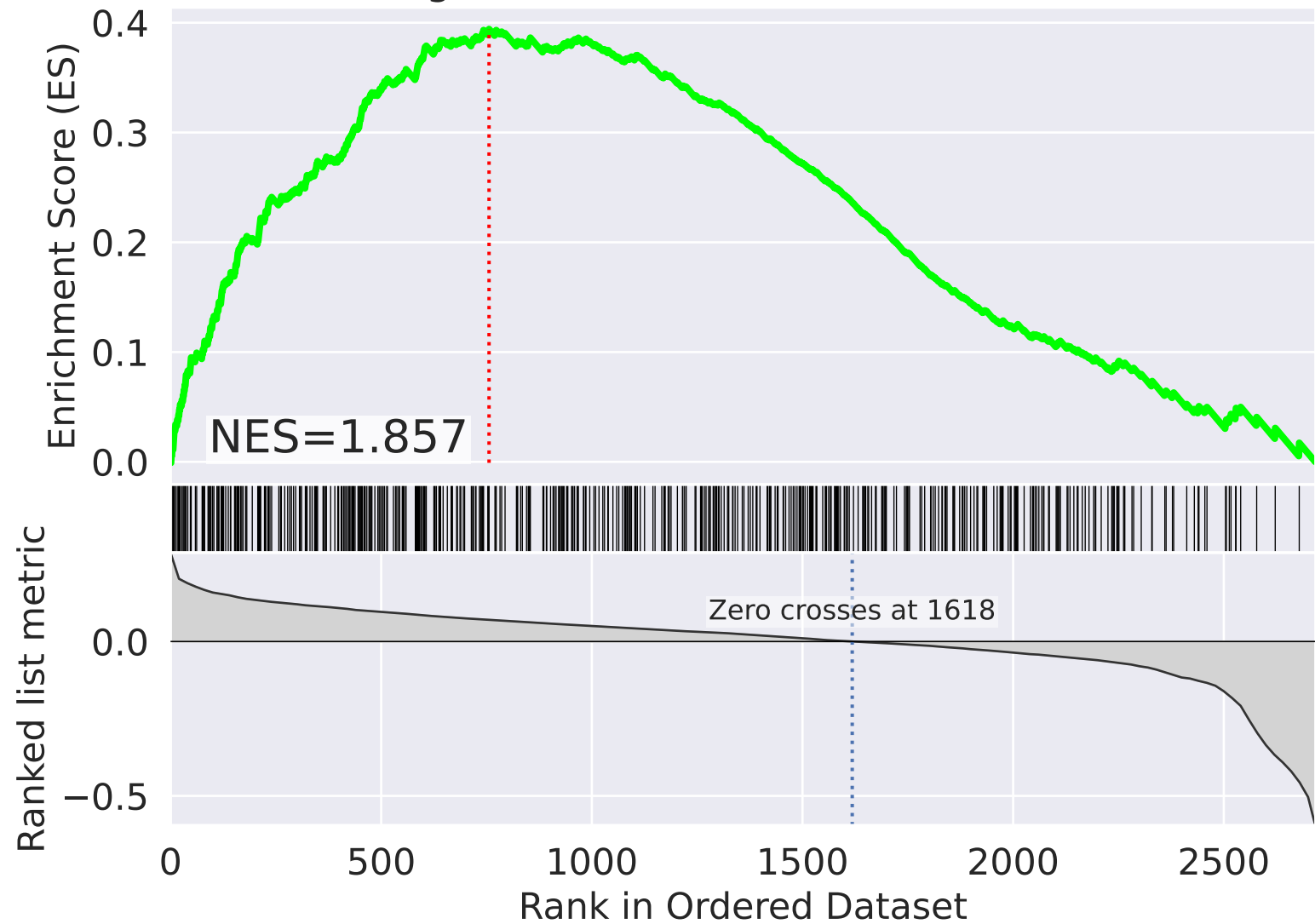
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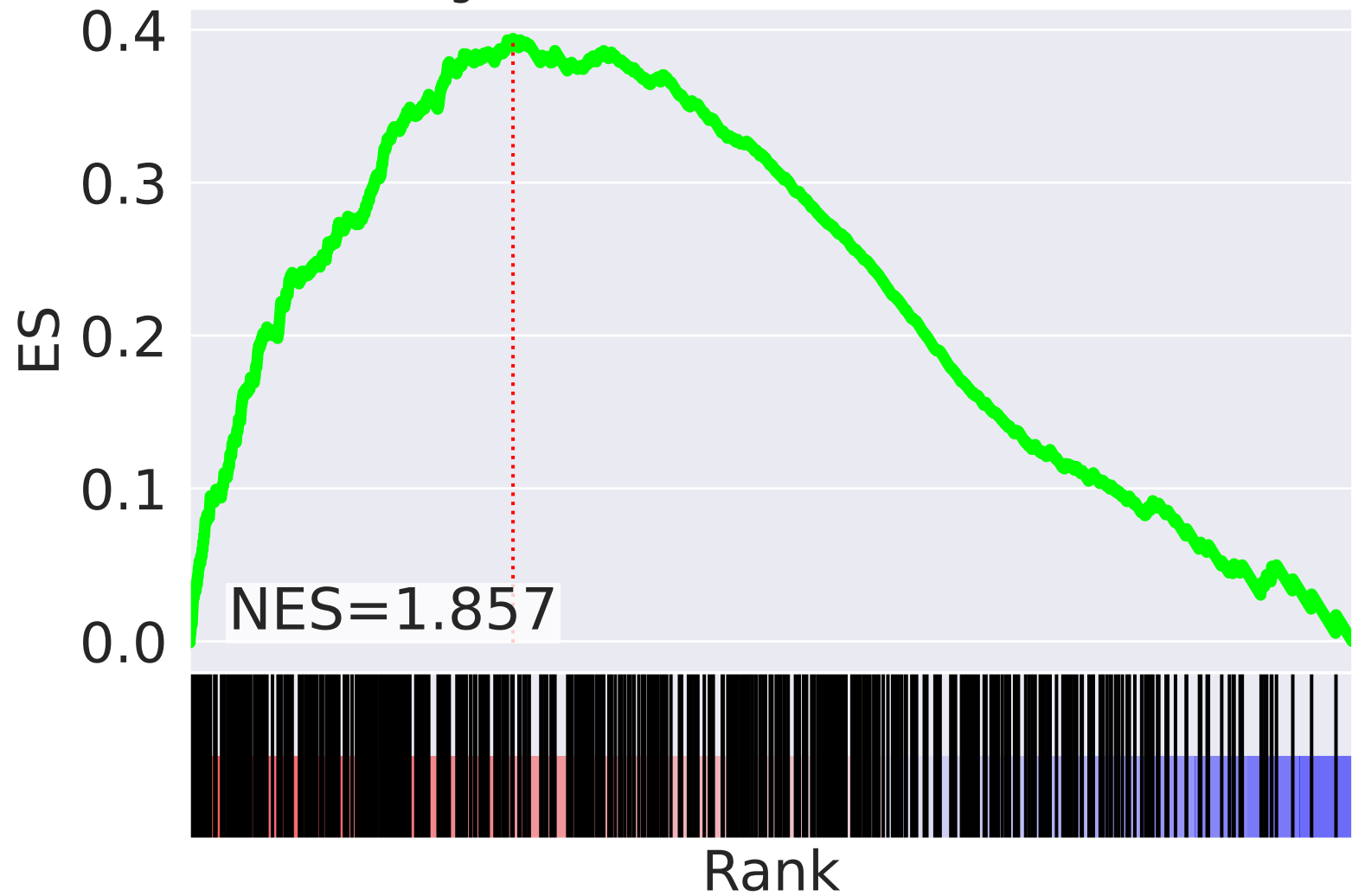
NES		SET
5.104		Mitotic Metaphase And Anaphase R-HSA-2555396
5.045		Mitotic Anaphase R-HSA-68882
-4.844		Transport Of Small Molecules R-HSA-382551
-4.779		Metabolism Of Nucleotides R-HSA-15869
4.687		M Phase R-HSA-68886
-4.457		Chromatin Modifying Enzymes R-HSA-3247509
-4.197		Iron Uptake And Transport R-HSA-917937
4.170		Separation Of Sister Chromatids R-HSA-2467813
-4.065		Metabolism Of Vitamins And Cofactors R-HSA-196854
-3.957		Nucleotide Biosynthesis R-HSA-8956320
-3.920		Metabolism Of Water-Soluble Vitamins And Cofactors R-HSA-196849
3.898		Mitotic G2-G2/M Phases R-HSA-453274
3.838		G2/M Transition R-HSA-69275
3.822		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
3.775		rRNA Processing R-HSA-72312





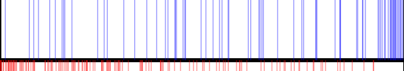
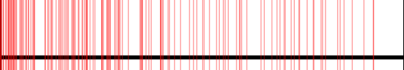
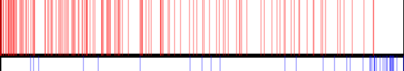
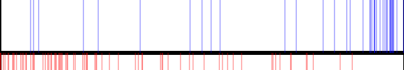
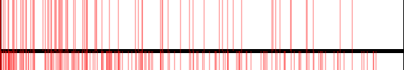
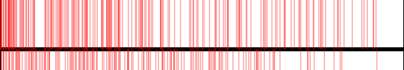
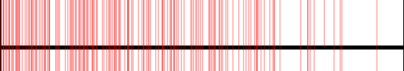
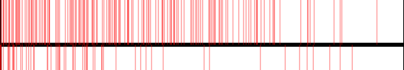
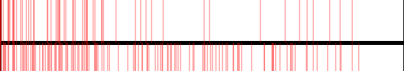
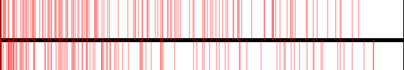

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=19$

Signal Transduction R-HSA-162582



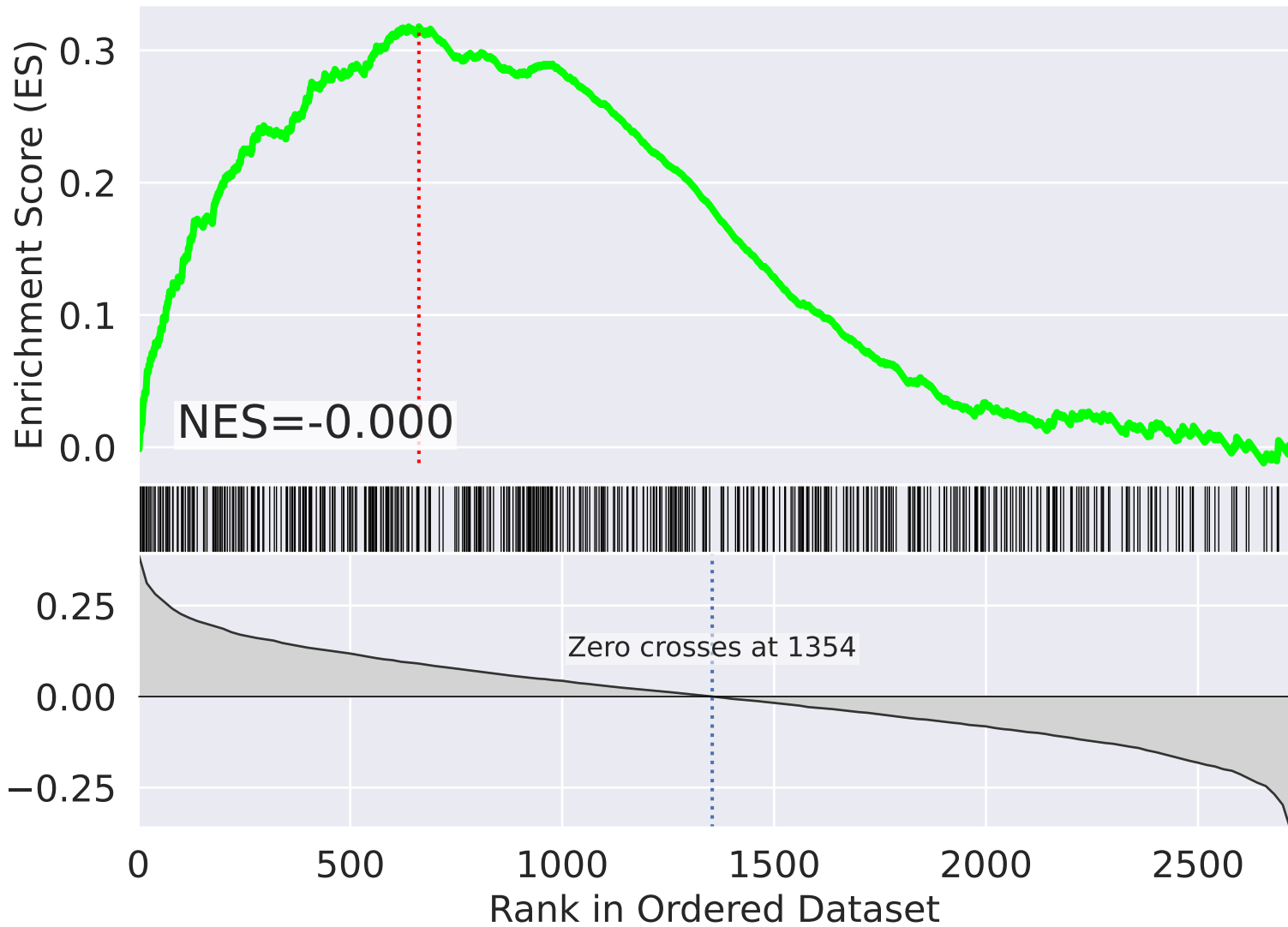
Signal Transduction R-HSA-162582



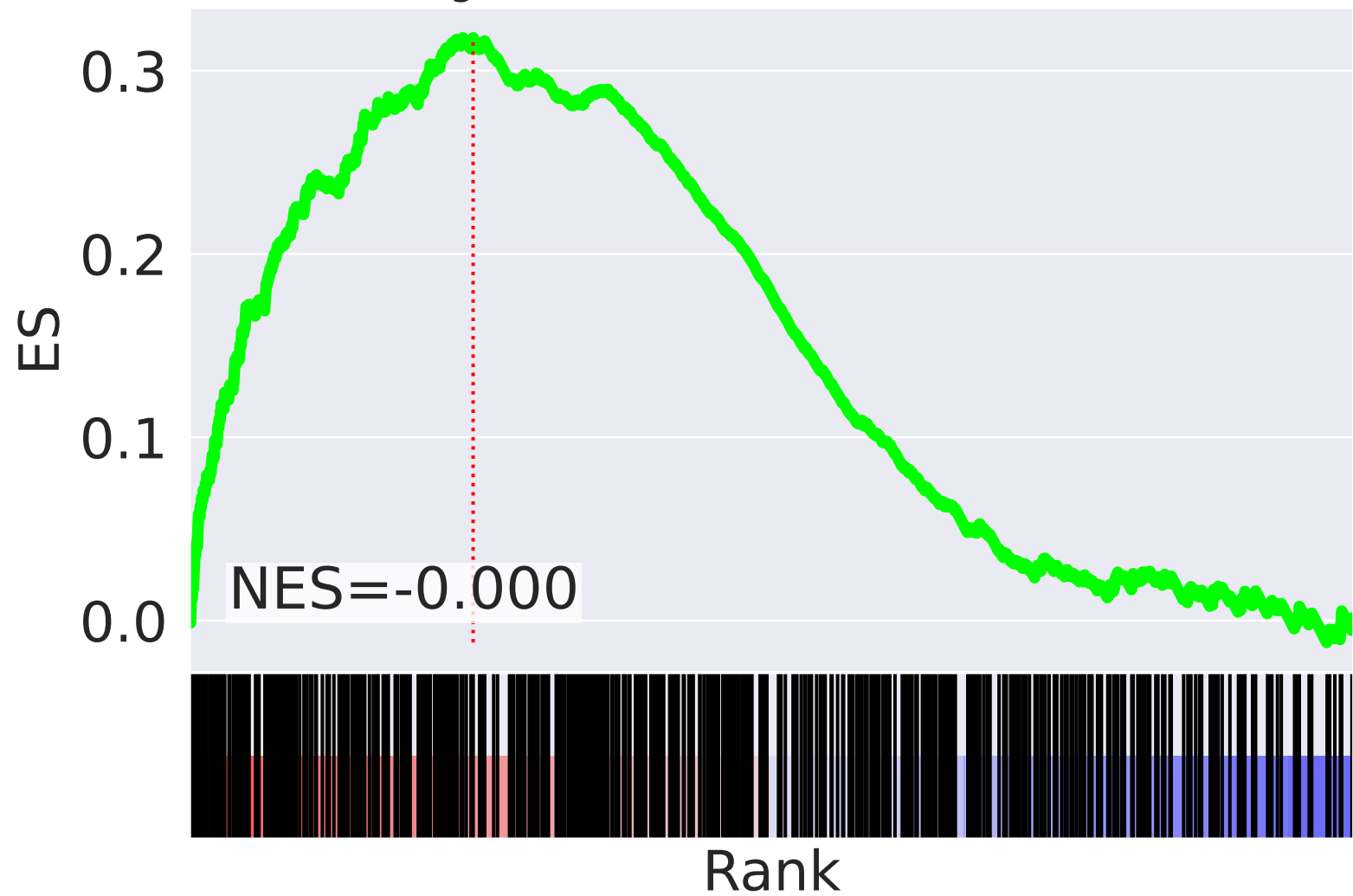
NES		SET
-6.297		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
-6.162		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
-5.865		Respiratory Electron Transport R-HSA-611105
-5.172		Complex I Biogenesis R-HSA-6799198
-4.365		Translation R-HSA-72766
4.178		Mitotic Metaphase And Anaphase R-HSA-2555396
4.147		Mitotic Anaphase R-HSA-68882
-4.132		Mitochondrial Biogenesis R-HSA-1592230
4.099		Host Interactions Of HIV Factors R-HSA-162909
4.072		M Phase R-HSA-68886
4.060		Vesicle-mediated Transport R-HSA-5653656
4.058		Membrane Trafficking R-HSA-199991
4.054		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
4.029		HIV Infection R-HSA-162906
4.020		Separation Of Sister Chromatids R-HSA-2467813

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=20$

Signal Transduction R-HSA-162582



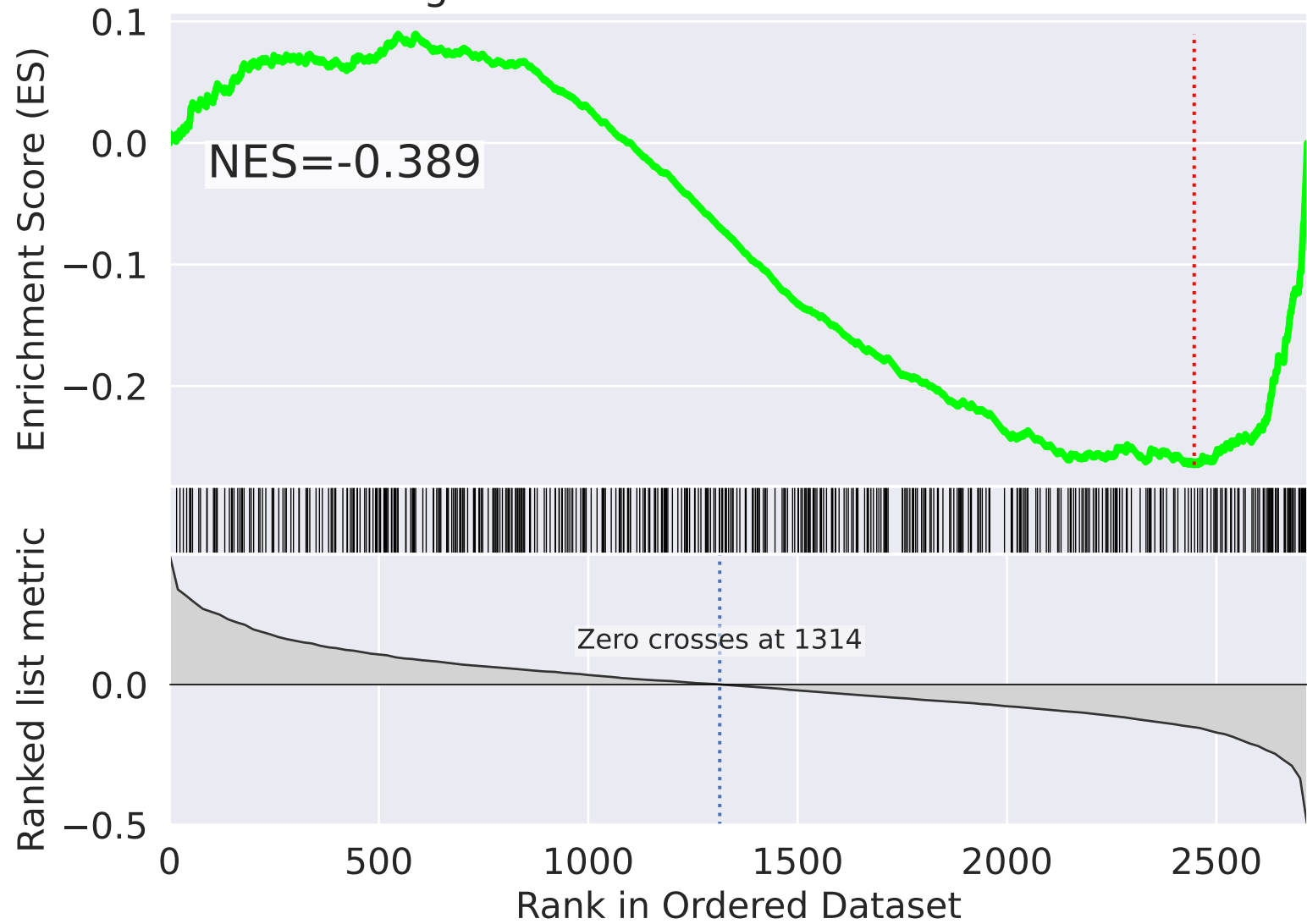
Signal Transduction R-HSA-162582



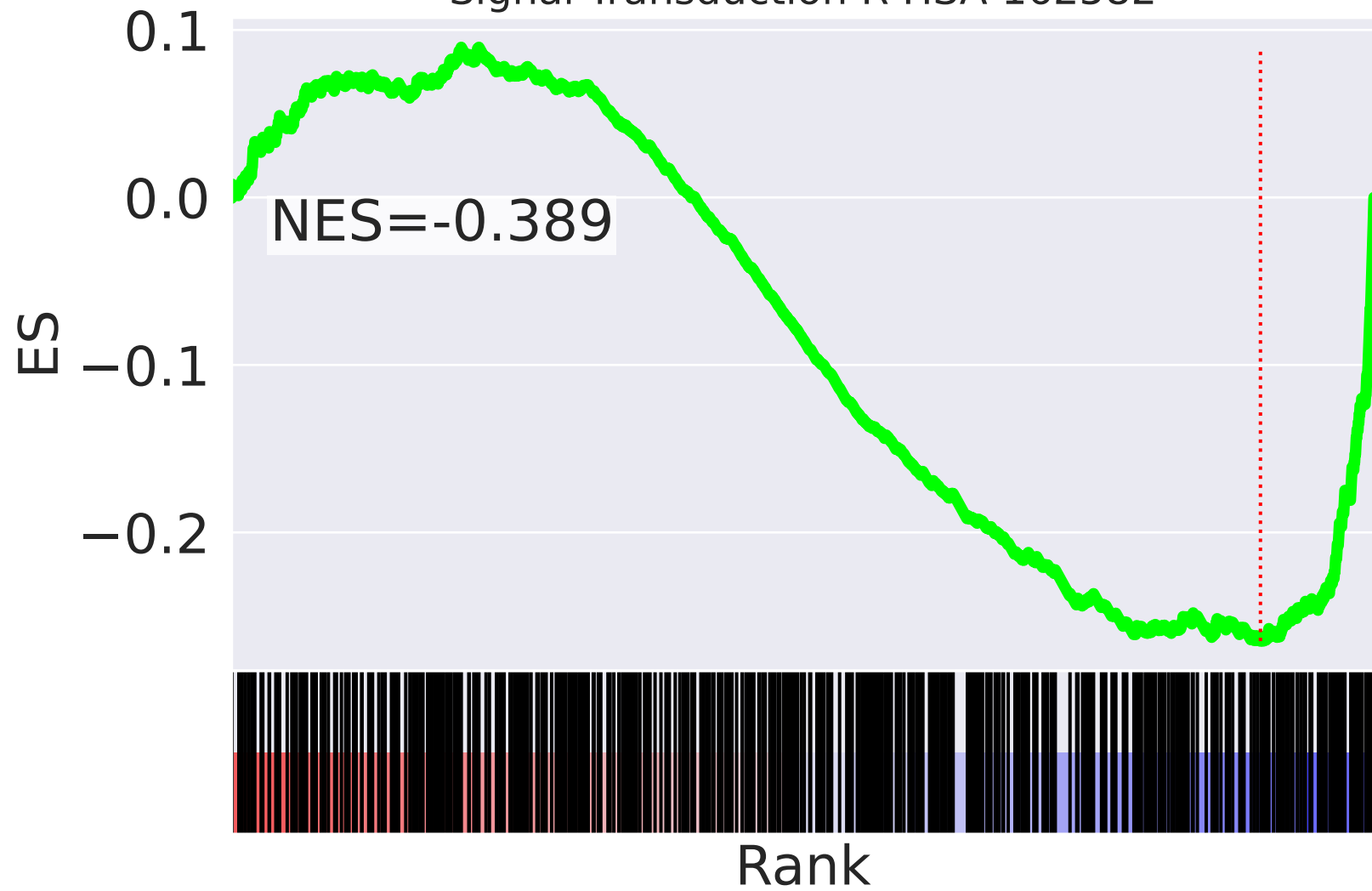
NES	SET
6.407	Vesicle-mediated Transport R-HSA-5653656
6.391	Membrane Trafficking R-HSA-199991
6.327	Mitotic Metaphase And Anaphase R-HSA-2555396
6.222	Mitotic Anaphase R-HSA-68882
6.120	M Phase R-HSA-68886
6.111	Separation Of Sister Chromatids R-HSA-2467813
5.792	Adaptive Immune System R-HSA-1280218
5.566	APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
5.491	Mitotic G2-G2/M Phases R-HSA-453274
5.351	Cell Cycle Checkpoints R-HSA-69620
5.347	G2/M Transition R-HSA-69275
5.341	MAPK Family Signaling Cascades R-HSA-5683057
5.258	Regulation Of APC/C Activators Between G1/S And Early Anaphase R-HSA-176408
5.248	S Phase R-HSA-69242
5.185	MAPK1/MAPK3 Signaling R-HSA-5684996

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=21$

Signal Transduction R-HSA-162582




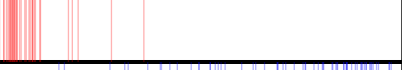
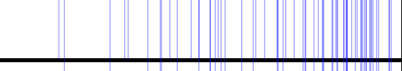
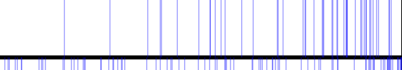
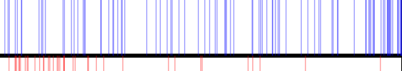
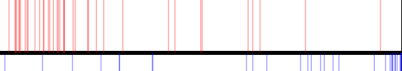

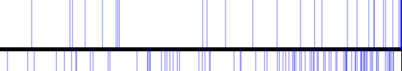
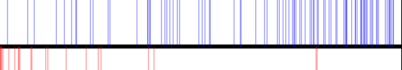

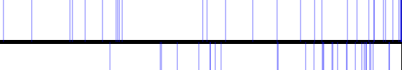
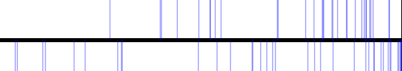



Signal Transduction R-HSA-162582



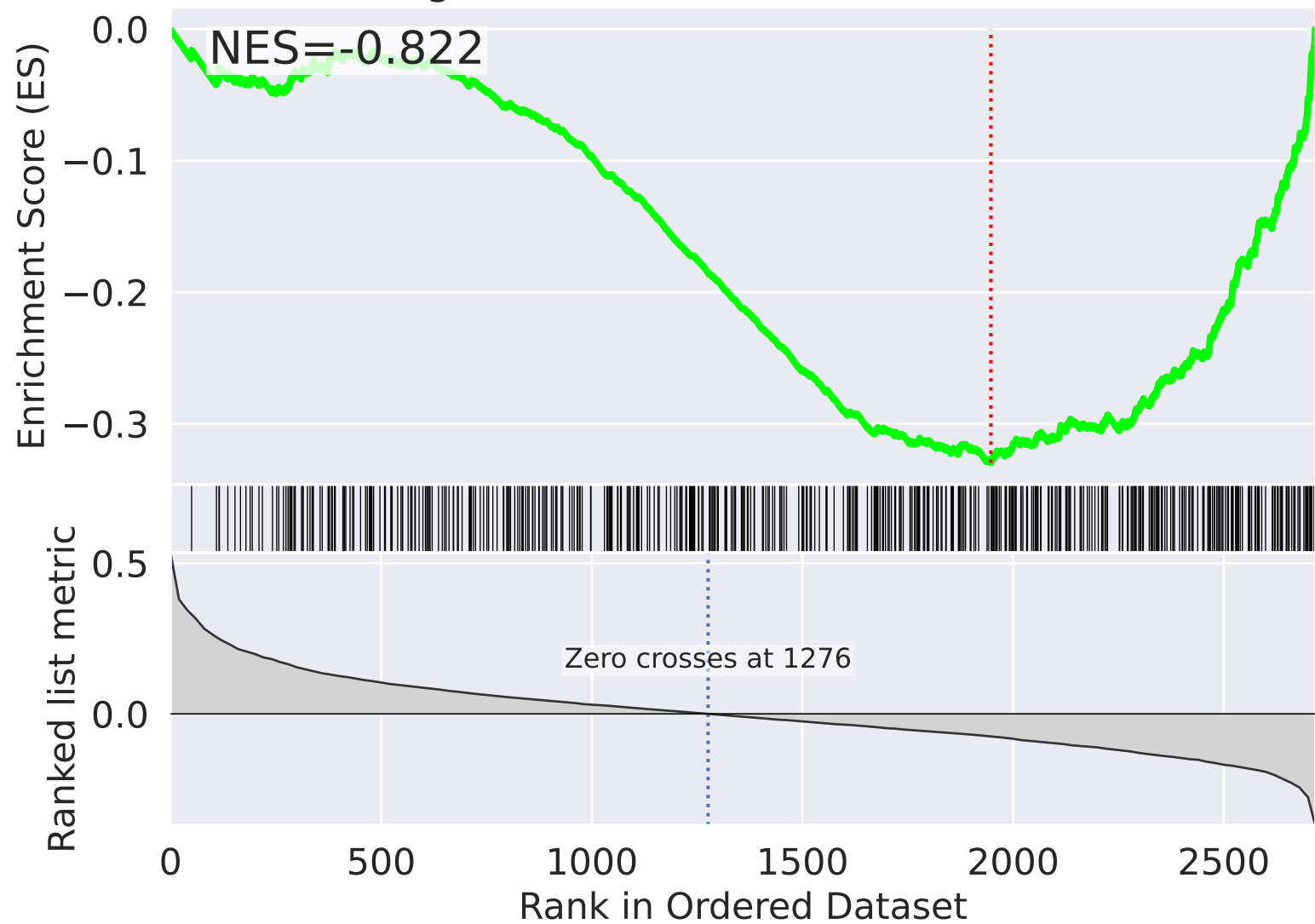
NES

SET

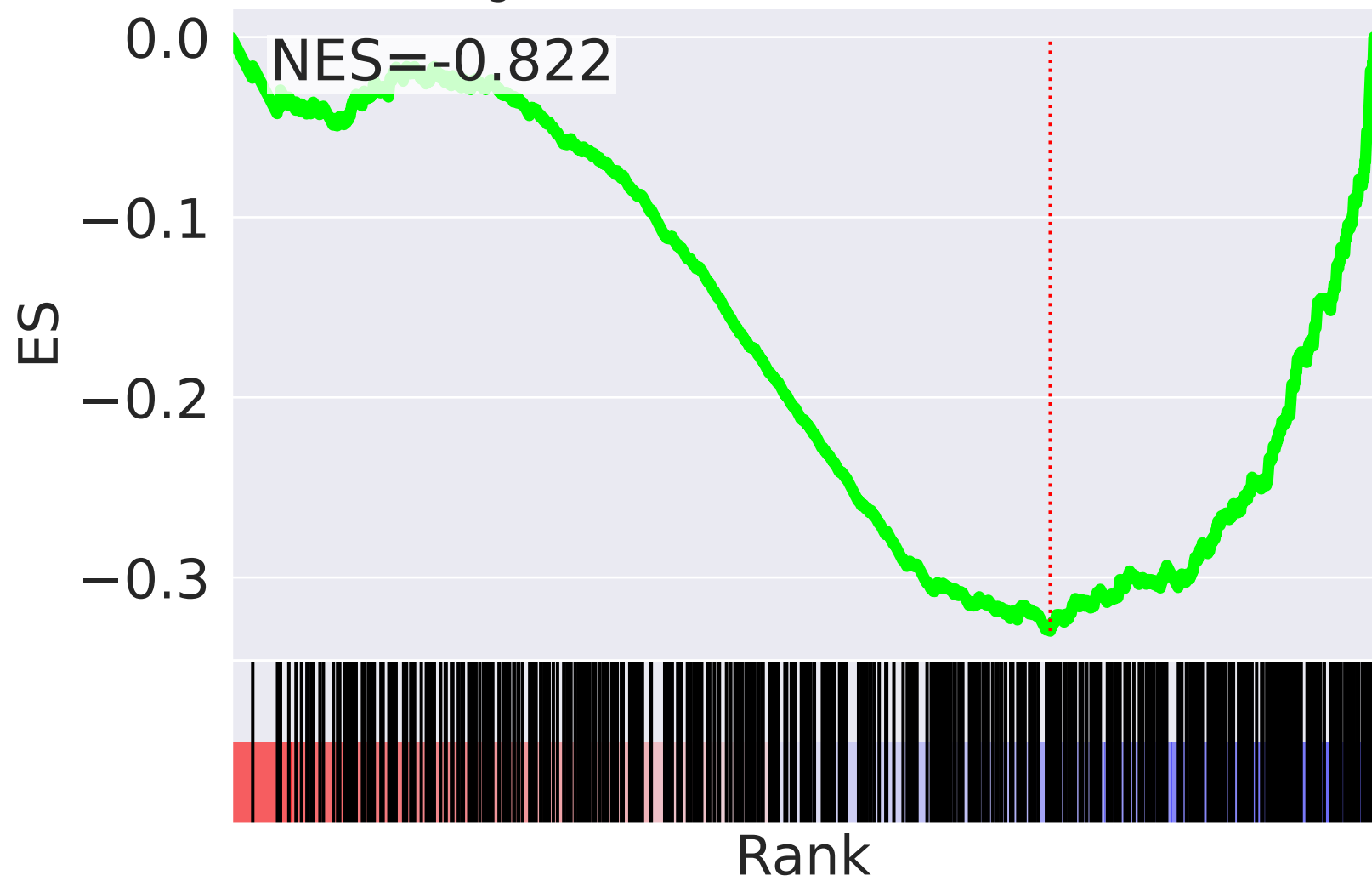
7.848		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
7.663		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
7.137		Respiratory Electron Transport R-HSA-611105
5.770		Complex I Biogenesis R-HSA-6799198
-4.959		Intra-Golgi And Retrograde Golgi-to-ER Traffic R-HSA-6811442
-4.578		Golgi-to-ER Retrograde Transport R-HSA-8856688
-4.479		Hemostasis R-HSA-109582
4.458		Mitochondrial Biogenesis R-HSA-1592230
-4.380		Leishmania Infection R-HSA-9658195
-4.373		VEGFA-VEGFR2 Pathway R-HSA-4420097
-4.365		Asparagine N-linked Glycosylation R-HSA-446203
4.202		Metabolism Of Nucleotides R-HSA-15869
-4.107		Signaling By VEGF R-HSA-194138
-4.076		COPI-dependent Golgi-to-ER Retrograde Traffic R-HSA-6811434
-4.072		Platelet Activation, Signaling And Aggregation R-HSA-76002






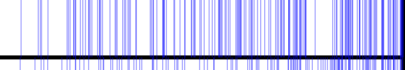
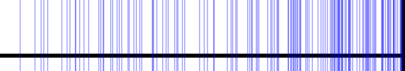
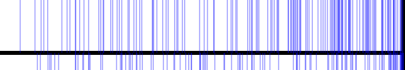
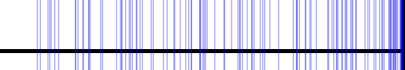
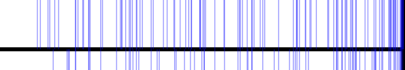
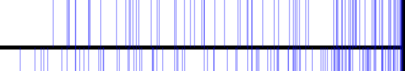
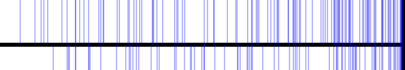
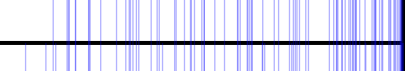
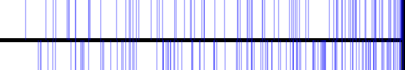

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=22$

Signal Transduction R-HSA-162582



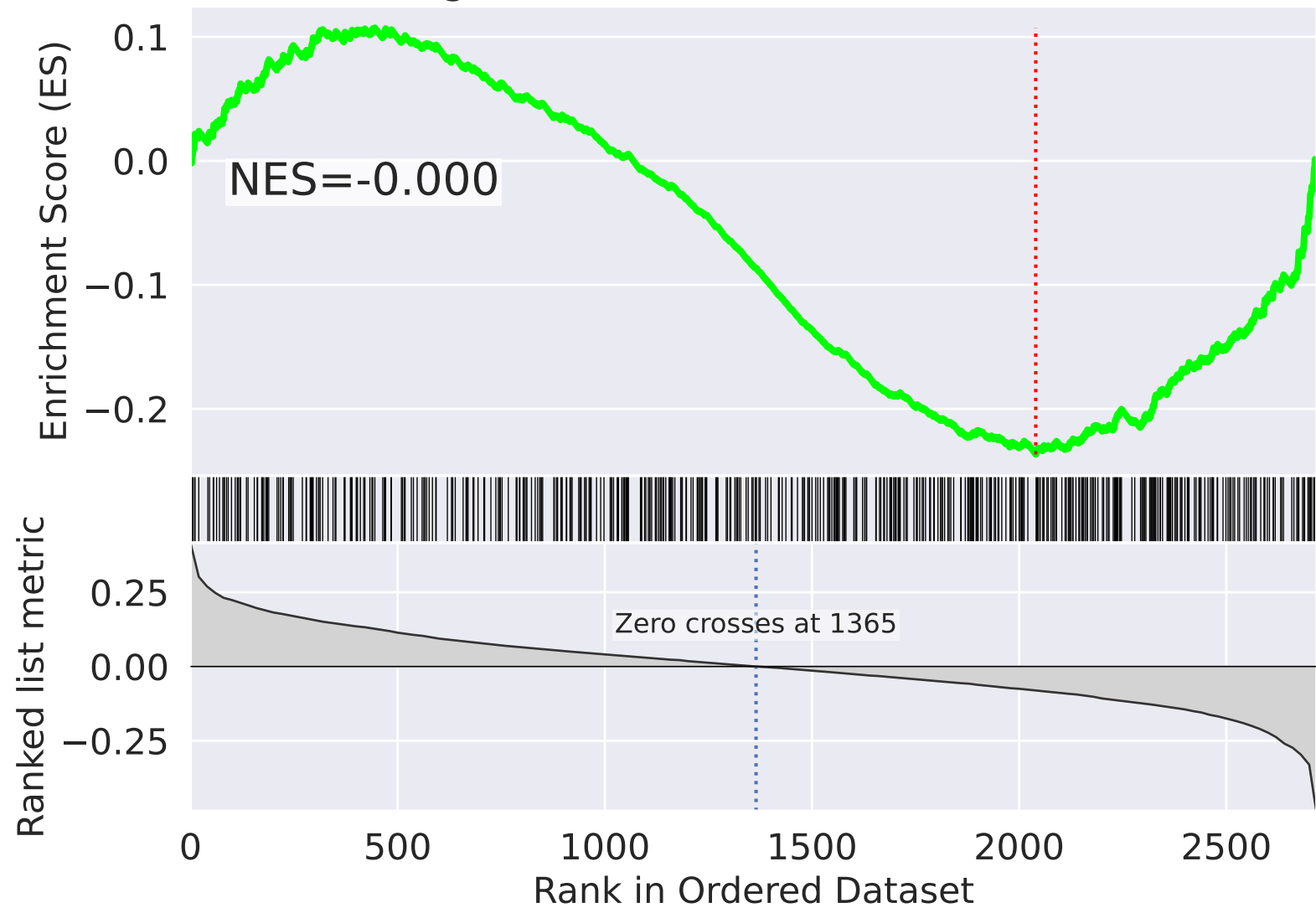
Signal Transduction R-HSA-162582



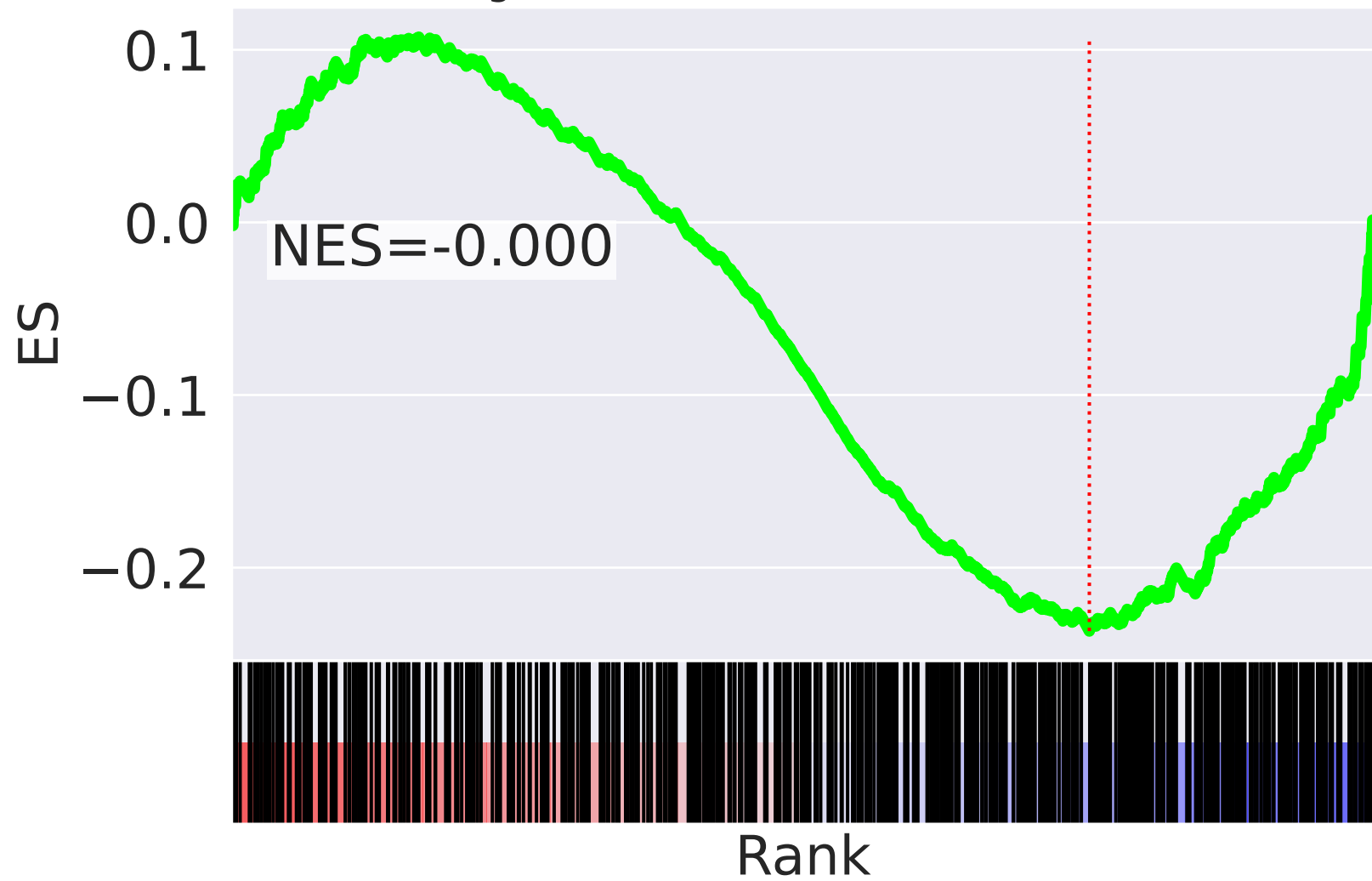
NES		SET
7.862		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
7.694		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
7.118		Respiratory Electron Transport R-HSA-611105
5.934		Complex I Biogenesis R-HSA-6799198
-5.875		M Phase R-HSA-68886
-5.811		Adaptive Immune System R-HSA-1280218
-5.768		Mitotic Metaphase And Anaphase R-HSA-2555396
-5.707		Mitotic Anaphase R-HSA-68882
-5.543		Nervous System Development R-HSA-9675108
-5.371		Axon Guidance R-HSA-422475
-5.303		RAF/MAP Kinase Cascade R-HSA-5673001
-5.291		Separation Of Sister Chromatids R-HSA-2467813
-5.264		MAPK1/MAPK3 Signaling R-HSA-5684996
-5.221		MAPK Family Signaling Cascades R-HSA-5683057
-5.106		HIV Infection R-HSA-162906

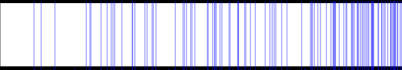
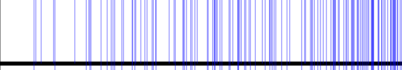
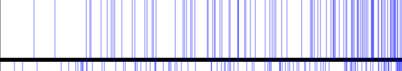
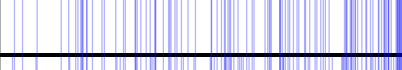
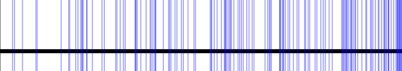
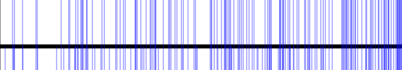
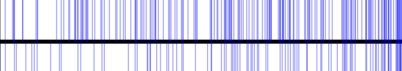
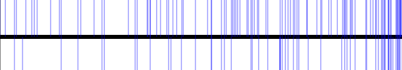
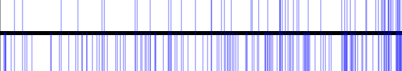
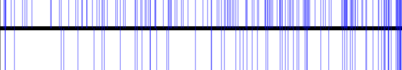
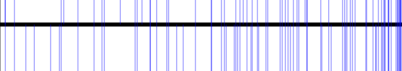
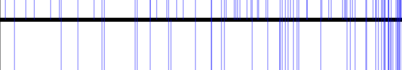



The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=23$

Signal Transduction R-HSA-162582



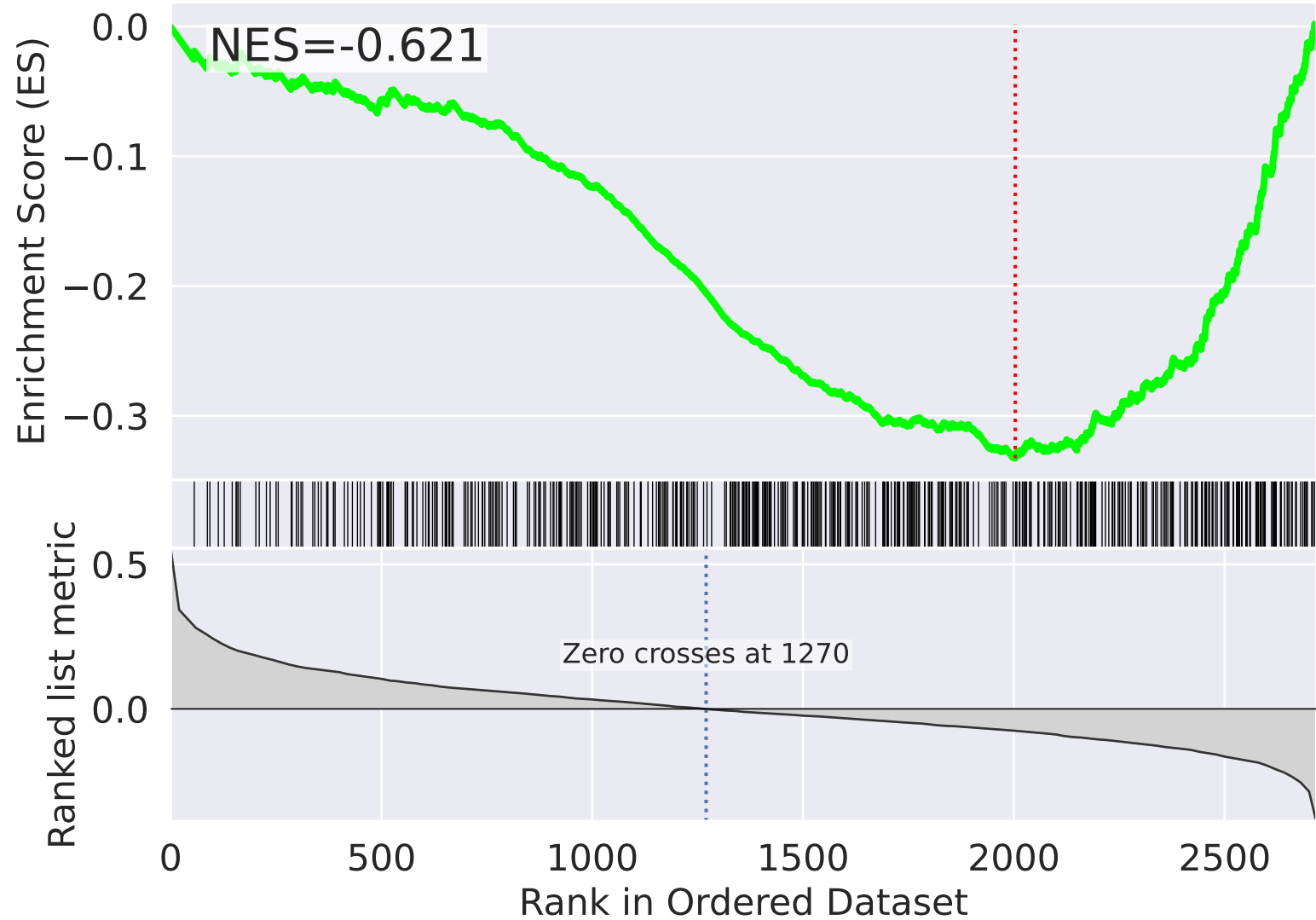
Signal Transduction R-HSA-162582



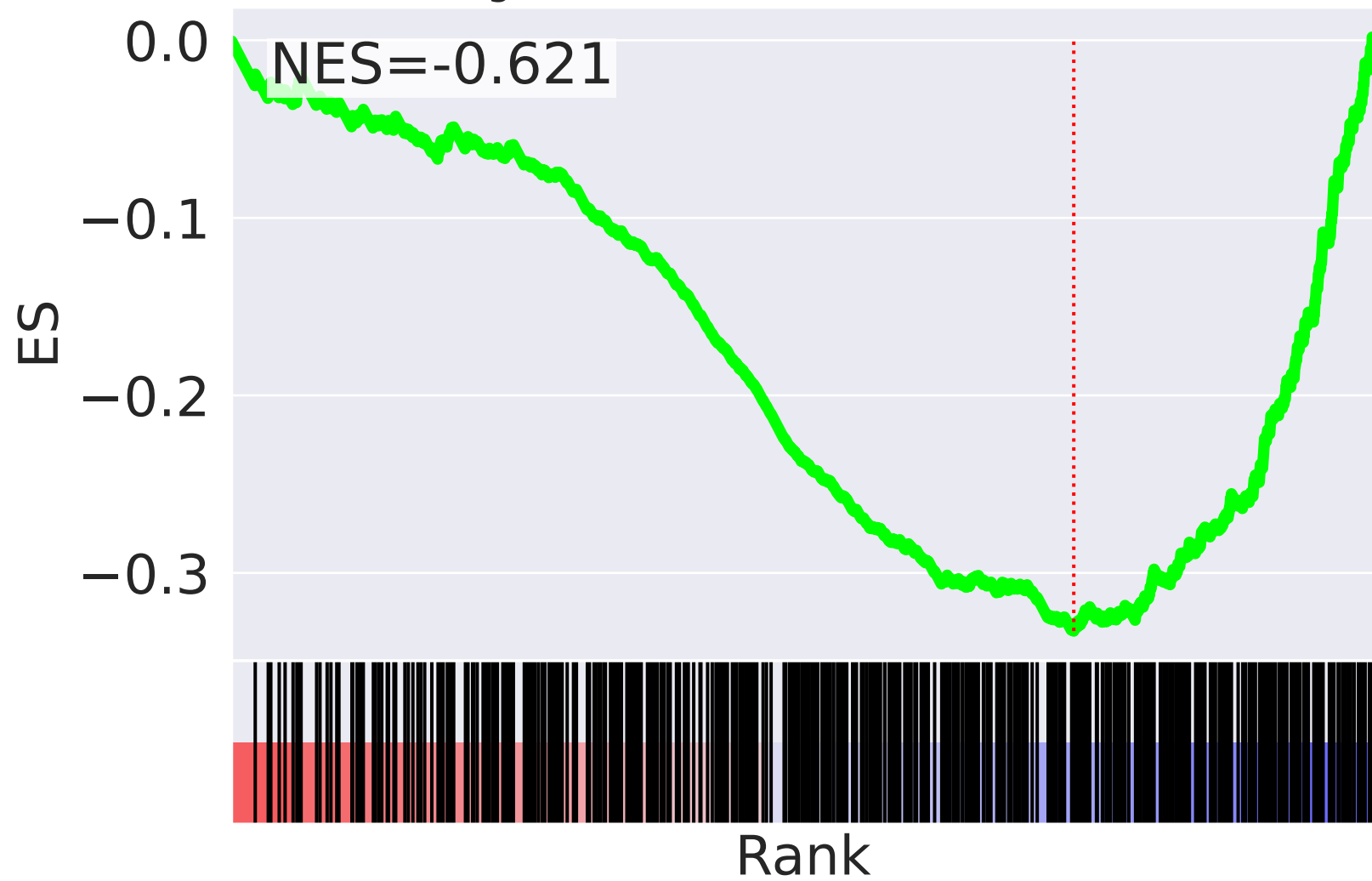
NES		SET
-6.845		mRNA Splicing R-HSA-72172
-6.751		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
-6.723		mRNA Splicing - Major Pathway R-HSA-72163
-6.219		Separation Of Sister Chromatids R-HSA-2467813
-6.092		Mitotic Metaphase And Anaphase R-HSA-2555396
-6.086		Mitotic Anaphase R-HSA-68882
-5.861		M Phase R-HSA-68886
-5.557		S Phase R-HSA-69242
-5.220		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
-5.219		Cell Cycle Checkpoints R-HSA-69620
-5.175		DNA Replication Pre-Initiation R-HSA-69002
-5.140		Synthesis Of DNA R-HSA-69239
-5.065		APC/C:Cdh1 Mediated Degradation Of Cdc20 And APC/C:Cdh1 Targets In Late Mitosis/Early G1 R-HSA-174178
-5.010		Switching Of Origins To A Post-Replicative State R-HSA-69052
-4.964		DNA Replication R-HSA-69306

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=24$

Signal Transduction R-HSA-162582



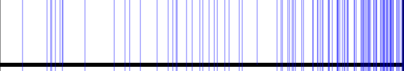
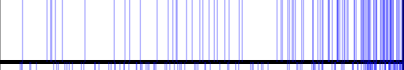
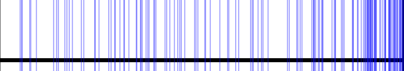
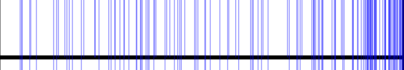
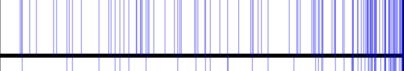
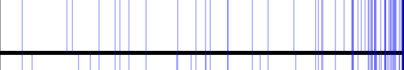
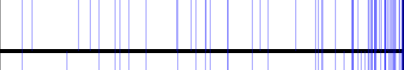
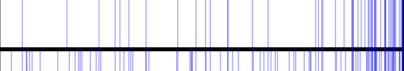
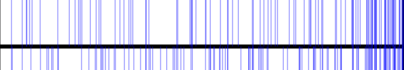
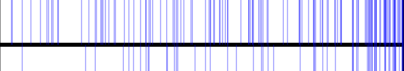
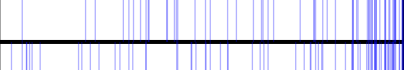
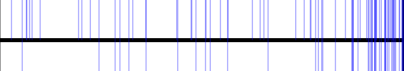



Signal Transduction R-HSA-162582



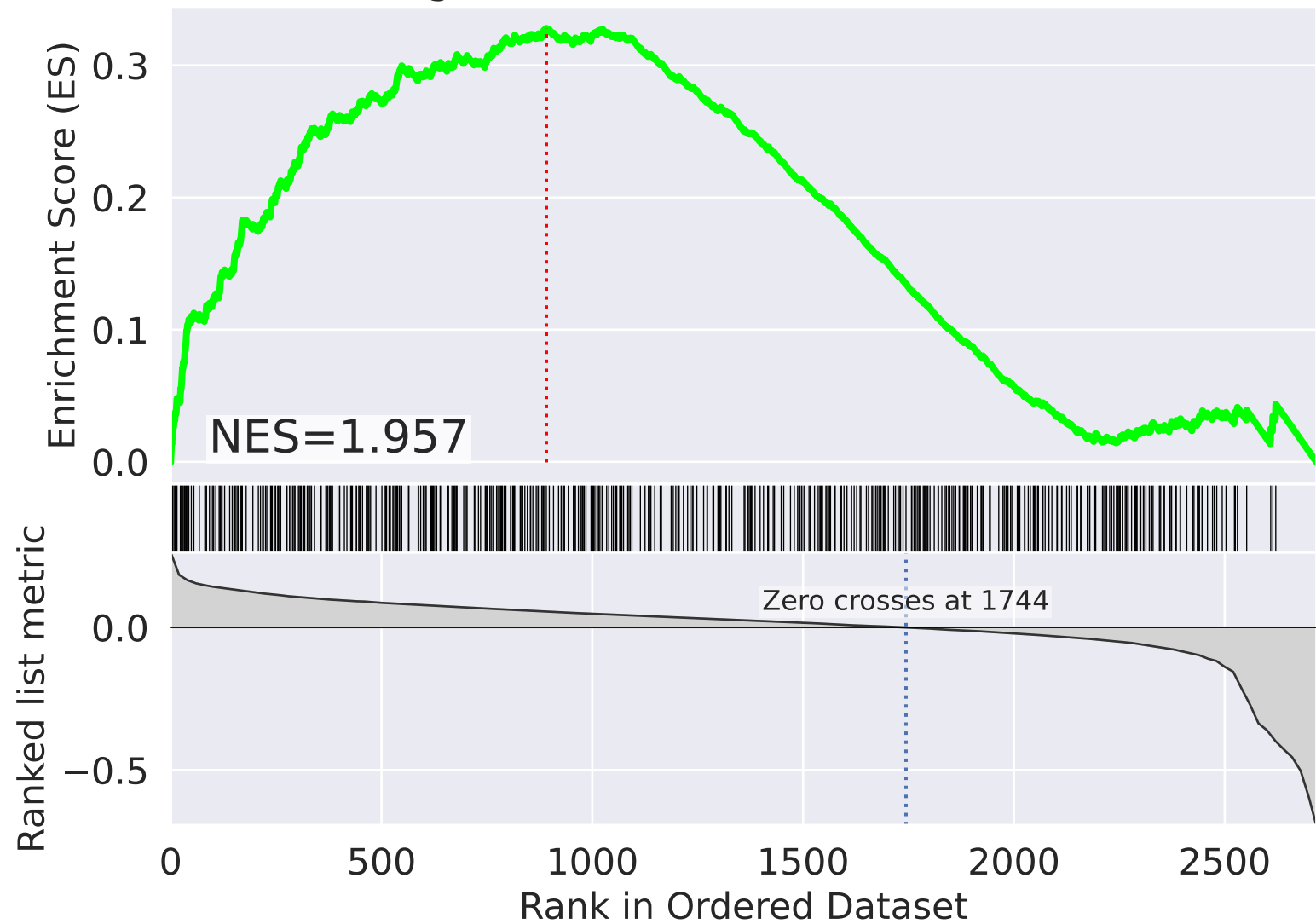
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SET

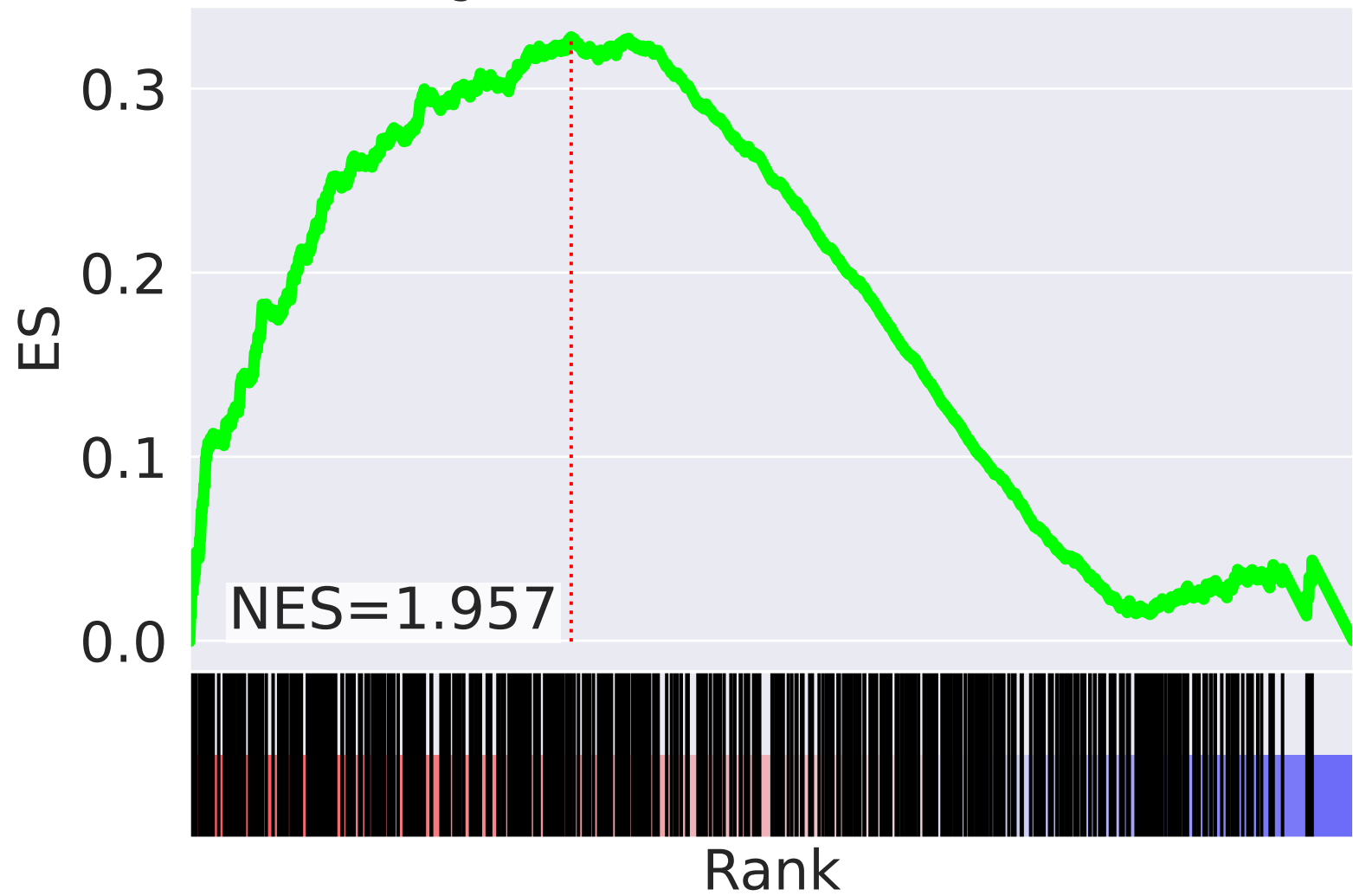
-7.302		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
-6.979		M Phase R-HSA-68886
-6.863		mRNA Splicing R-HSA-72172
-6.799		mRNA Splicing - Major Pathway R-HSA-72163
-6.723		Mitotic Metaphase And Anaphase R-HSA-2555396
-6.648		Mitotic Anaphase R-HSA-68882
-6.519		Separation Of Sister Chromatids R-HSA-2467813
-6.088		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
-6.059		Switching Of Origins To A Post-Replicative State R-HSA-69052
-5.910		Regulation Of APC/C Activators Between G1/S And Early Anaphase R-HSA-176408
-5.909		S Phase R-HSA-69242
-5.858		HIV Infection R-HSA-162906
-5.846		Disorders Of Transmembrane Transporters R-HSA-5619115
-5.732		Synthesis Of DNA R-HSA-69239
-5.714		CDK-mediated Phosphorylation And Removal Of Cdc6 R-HSA-69017

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=25$

Signal Transduction R-HSA-162582



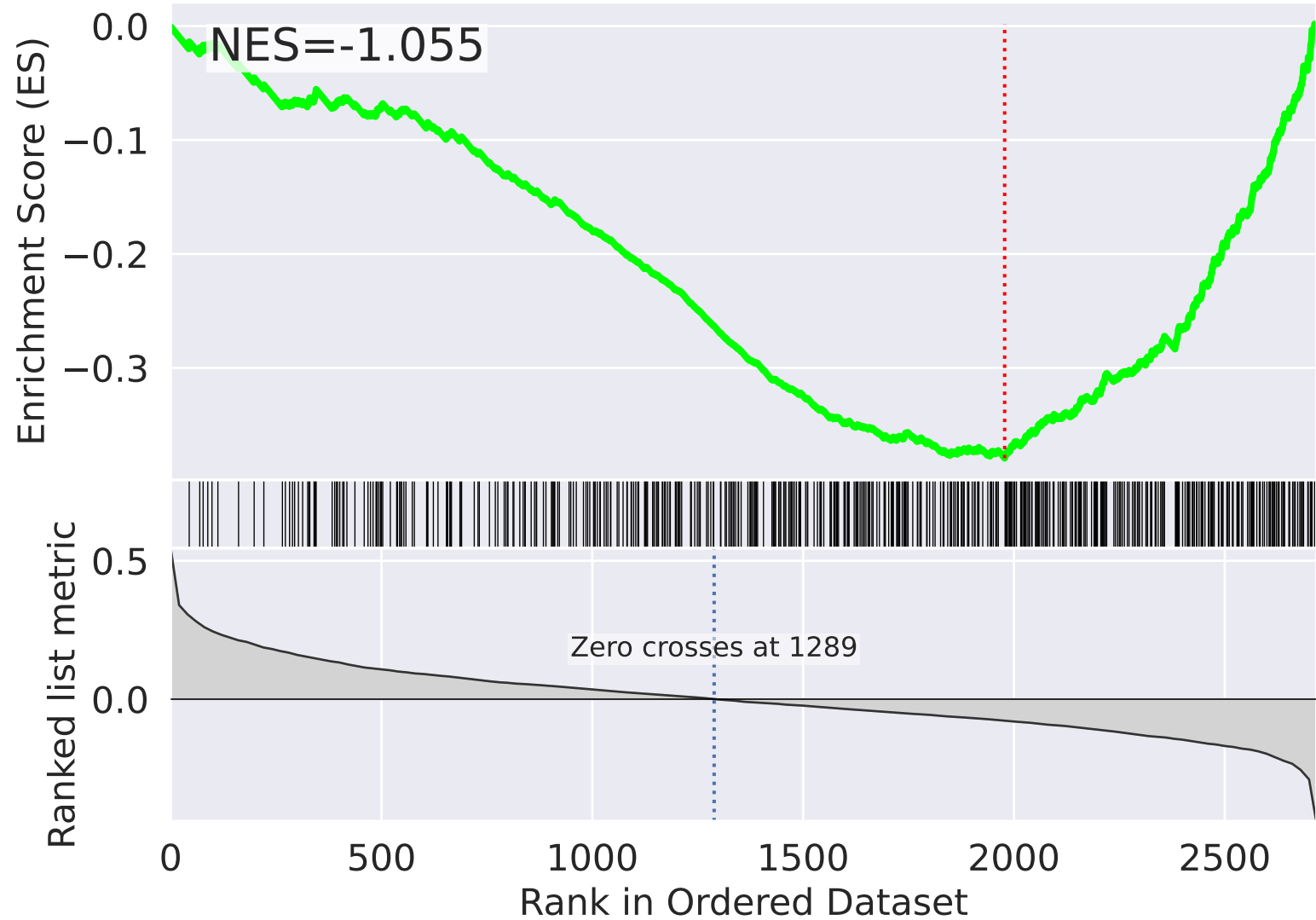
Signal Transduction R-HSA-162582



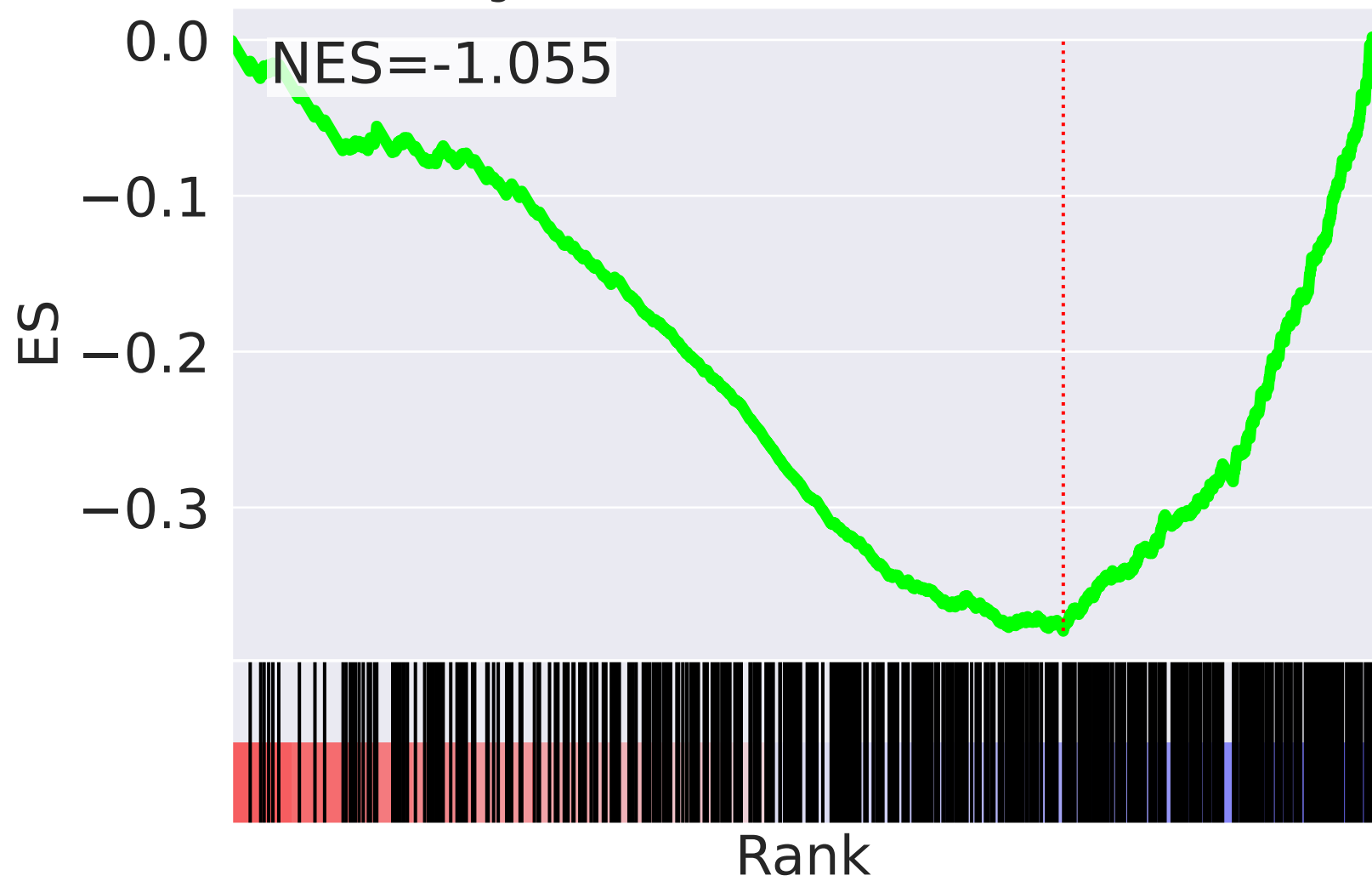
NES	SET
-5.346	Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
-5.250	Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
-5.006	Respiratory Electron Transport R-HSA-611105
-4.507	Complex I Biogenesis R-HSA-6799198
-3.960	Translation R-HSA-72766
-3.714	tRNA Aminoacylation R-HSA-379724
-3.674	Mitochondrial Biogenesis R-HSA-1592230
-3.503	Mitochondrial tRNA Aminoacylation R-HSA-379726
-3.325	Mitochondrial Protein Import R-HSA-1268020
-3.296	Cristae Formation R-HSA-8949613
-3.212	TP53 Regulates Metabolic Genes R-HSA-5628897
-3.178	Organelle Biogenesis And Maintenance R-HSA-1852241
-3.111	Cytoprotection By HMOX1 R-HSA-9707564
-3.105	Transcriptional Activation Of Mitochondrial Biogenesis R-HSA-2151201
-3.055	Formation Of ATP By Chemiosmotic Coupling R-HSA-163210

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=26$

Signal Transduction R-HSA-162582



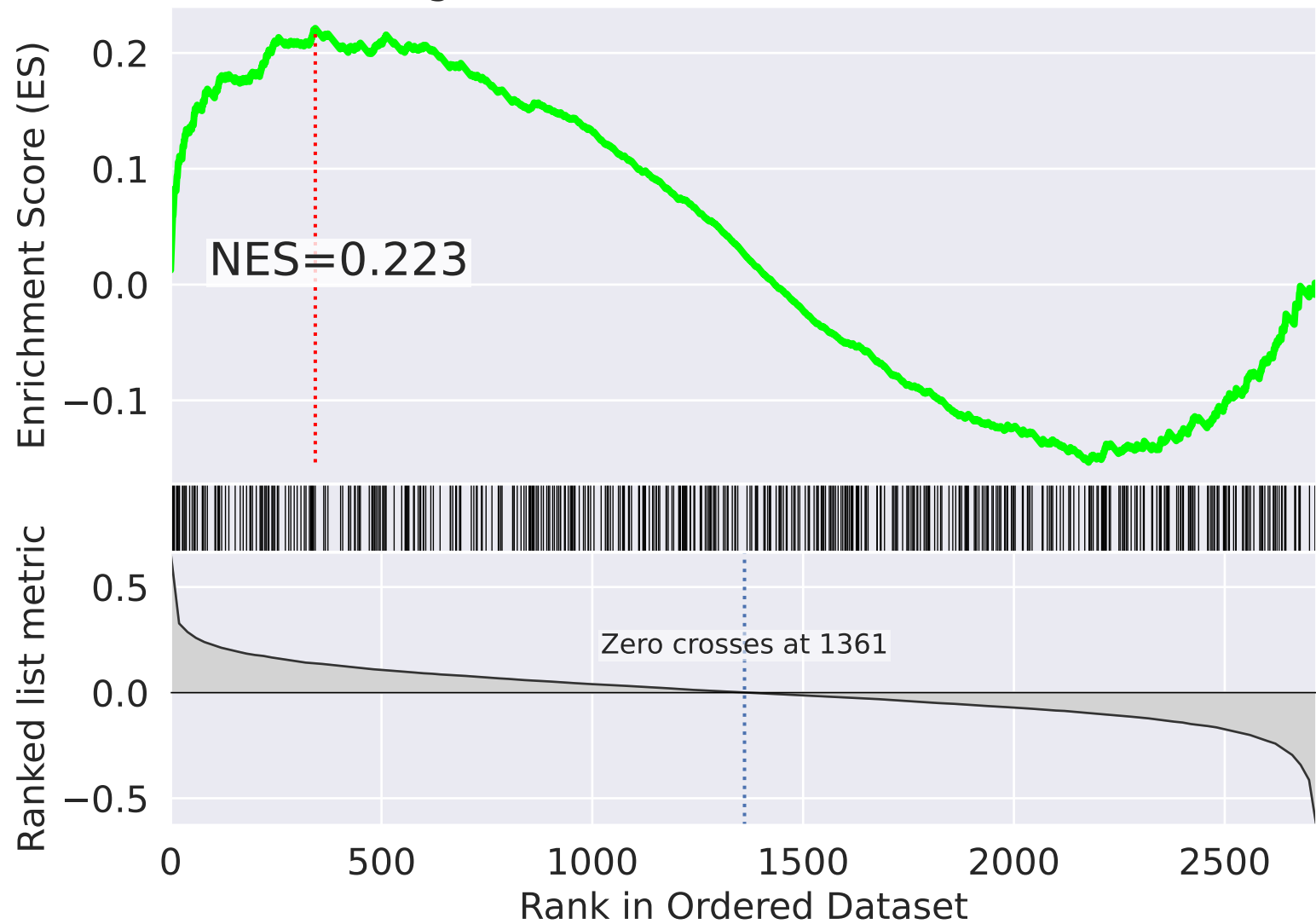
Signal Transduction R-HSA-162582



NES		SET
6.367		rRNA Processing R-HSA-72312
-6.235		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
6.073		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
-5.768		mRNA Splicing - Major Pathway R-HSA-72163
-5.676		Mitotic Metaphase And Anaphase R-HSA-2555396
-5.661		Diseases Of Signal Transduction By Growth Factor Receptors And Second Messengers R-HSA-5663202
-5.644		mRNA Splicing R-HSA-72172
-5.633		Host Interactions Of HIV Factors R-HSA-162909
-5.600		Mitotic Anaphase R-HSA-68882
5.577		Major Pathway Of rRNA Processing In Nucleolus And Cytosol R-HSA-6791226
-5.530		Signaling By NOTCH R-HSA-157118
-5.526		G1/S Transition R-HSA-69206
-5.507		HIV Infection R-HSA-162906
-5.436		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
-5.409		Separation Of Sister Chromatids R-HSA-2467813

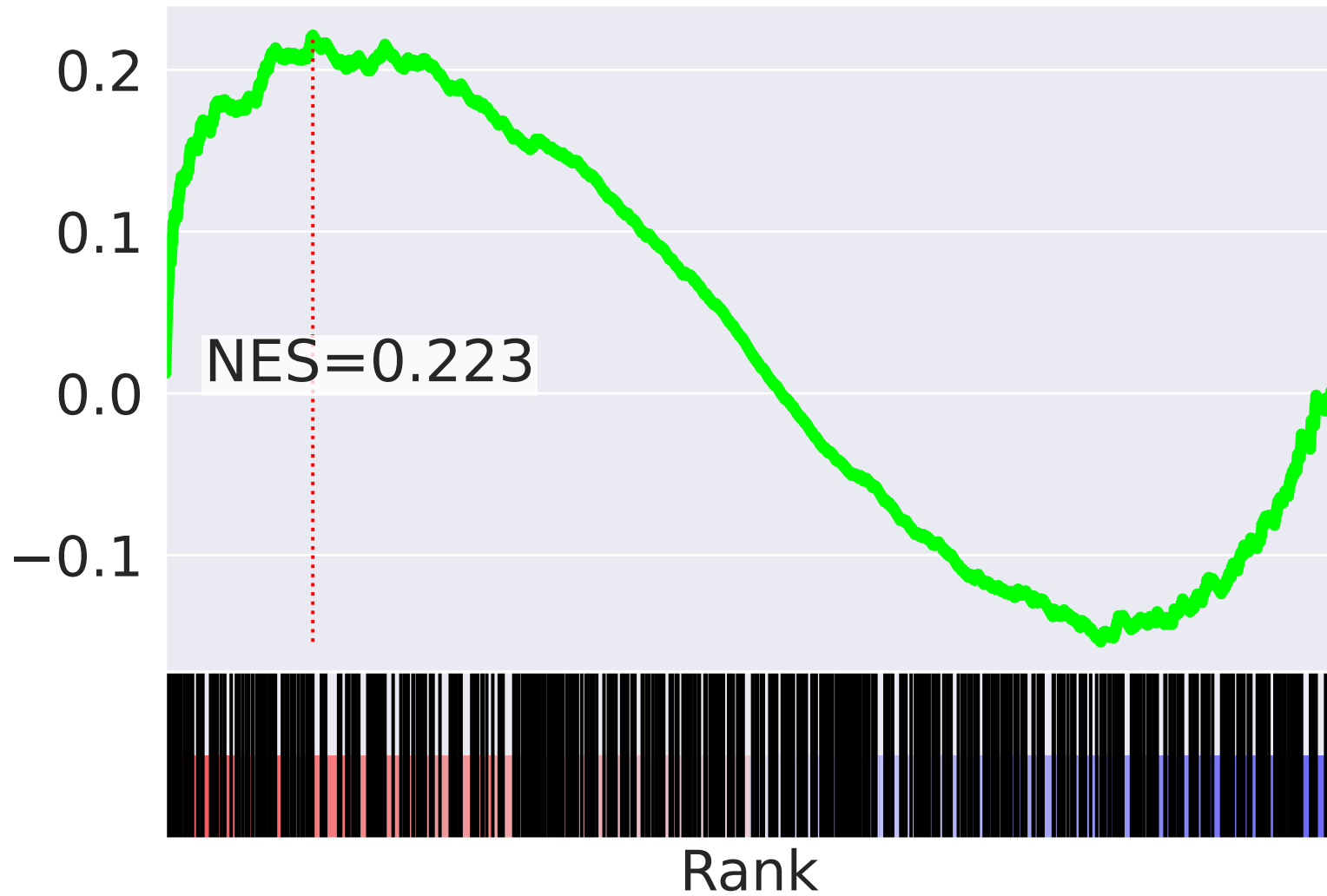
The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=27$

Signal Transduction R-HSA-162582



Signal Transduction R-HSA-162582

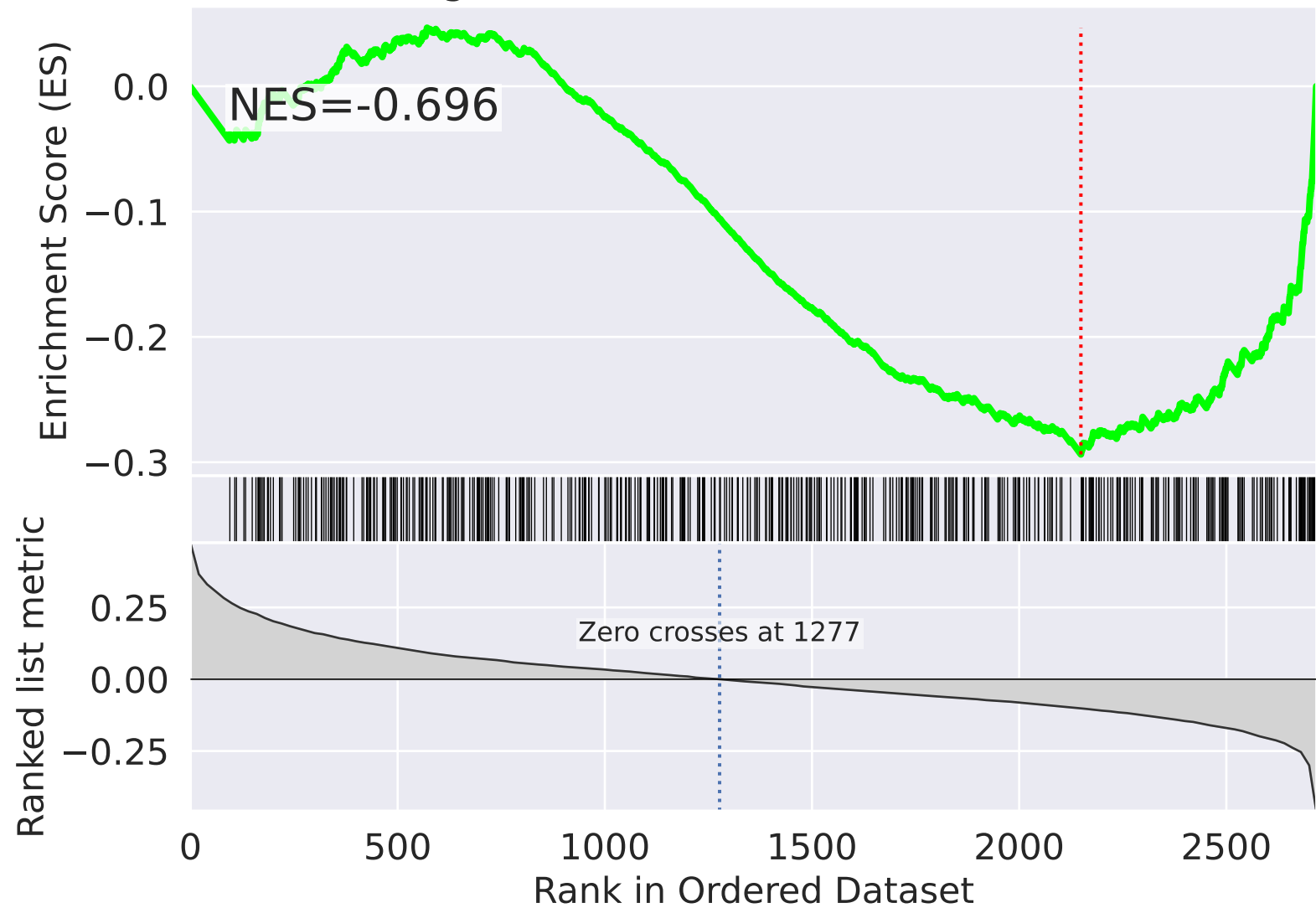
ES



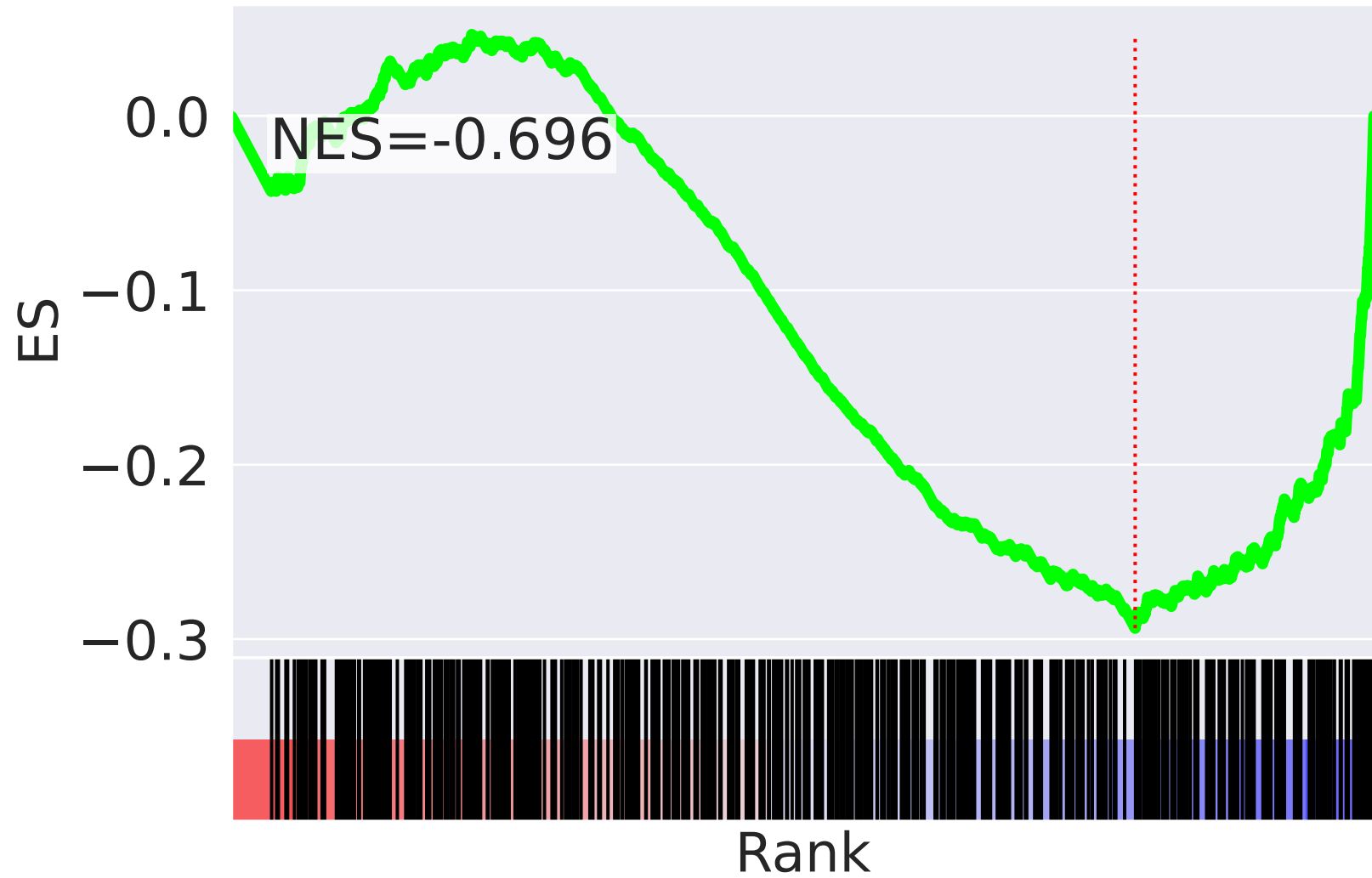
NES		SET
-5.878		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
-5.598		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
-5.077		Respiratory Electron Transport R-HSA-611105
-4.852		Chromatin Modifying Enzymes R-HSA-3247509
-4.525		Metabolism Of Nucleotides R-HSA-15869
4.516		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
4.389		Major Pathway Of rRNA Processing In Nucleolus And Cytosol R-HSA-6791226
4.234		Leishmania Infection R-HSA-9658195
4.168		rRNA Processing R-HSA-72312
-4.038		Metabolism Of Vitamins And Cofactors R-HSA-196854
4.006		Intra-Golgi And Retrograde Golgi-to-ER Traffic R-HSA-6811442
3.932		Mitotic Metaphase And Anaphase R-HSA-2555396
3.905		Nervous System Development R-HSA-9675108
-3.896		Nucleotide Biosynthesis R-HSA-8956320
3.858		MAPK Family Signaling Cascades R-HSA-5683057





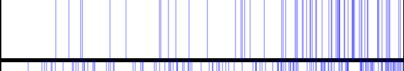
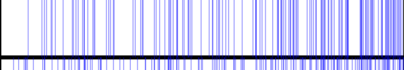
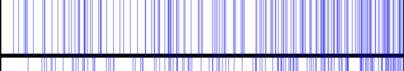
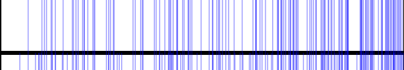
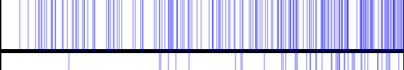
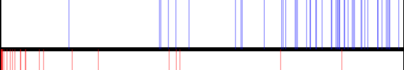
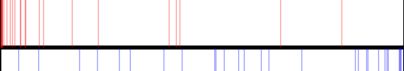
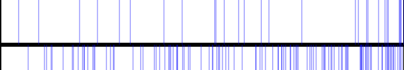
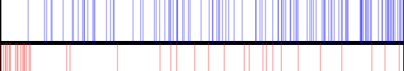
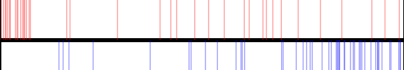

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=28$

Signal Transduction R-HSA-162582



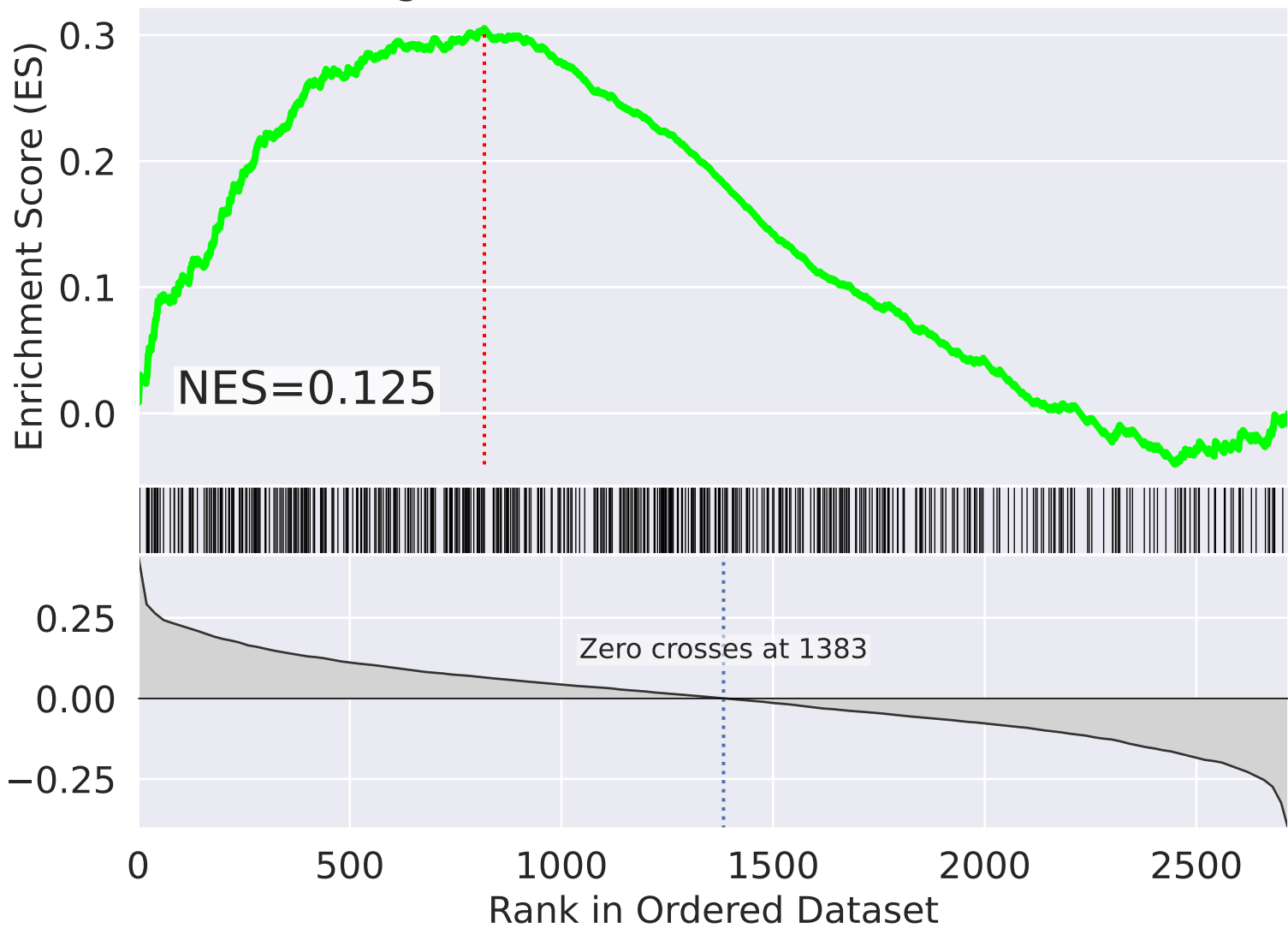
Signal Transduction R-HSA-162582



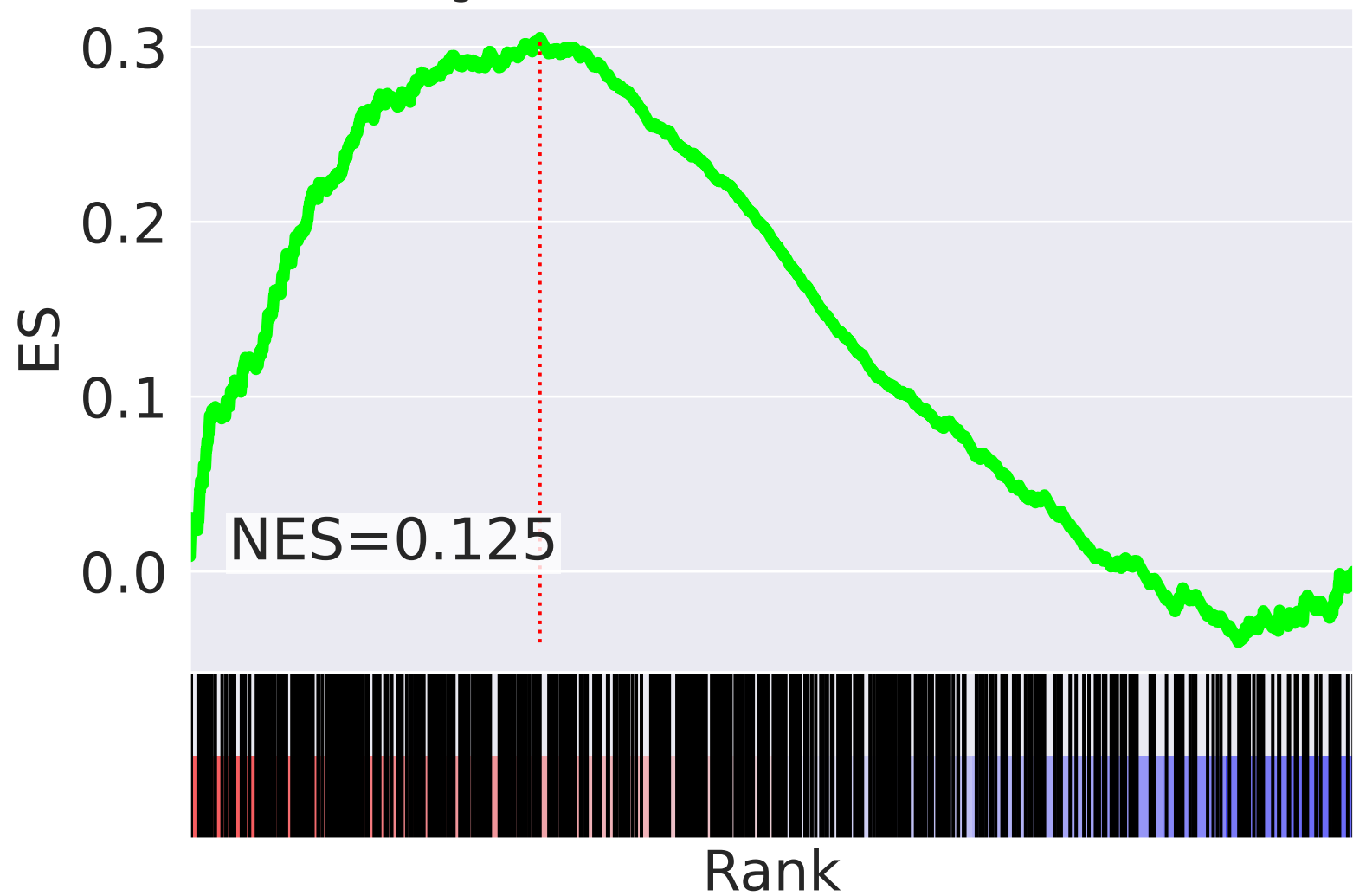
NES		SET
8.014		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
7.779		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
7.225		Respiratory Electron Transport R-HSA-611105
5.825		Complex I Biogenesis R-HSA-6799198
-5.038		Intra-Golgi And Retrograde Golgi-to-ER Traffic R-HSA-6811442
-4.943		Mitotic Metaphase And Anaphase R-HSA-2555396
-4.905		Adaptive Immune System R-HSA-1280218
-4.896		Mitotic Anaphase R-HSA-68882
-4.723		M Phase R-HSA-68886
-4.617		Golgi-to-ER Retrograde Transport R-HSA-8856688
4.576		Metabolism Of Nucleotides R-HSA-15869
-4.408		VEGFA-VEGFR2 Pathway R-HSA-4420097
-4.355		Separation Of Sister Chromatids R-HSA-2467813
4.350		TP53 Regulates Metabolic Genes R-HSA-5628897
-4.323		ER To Golgi Anterograde Transport R-HSA-199977

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=29$

Signal Transduction R-HSA-162582



Signal Transduction R-HSA-162582



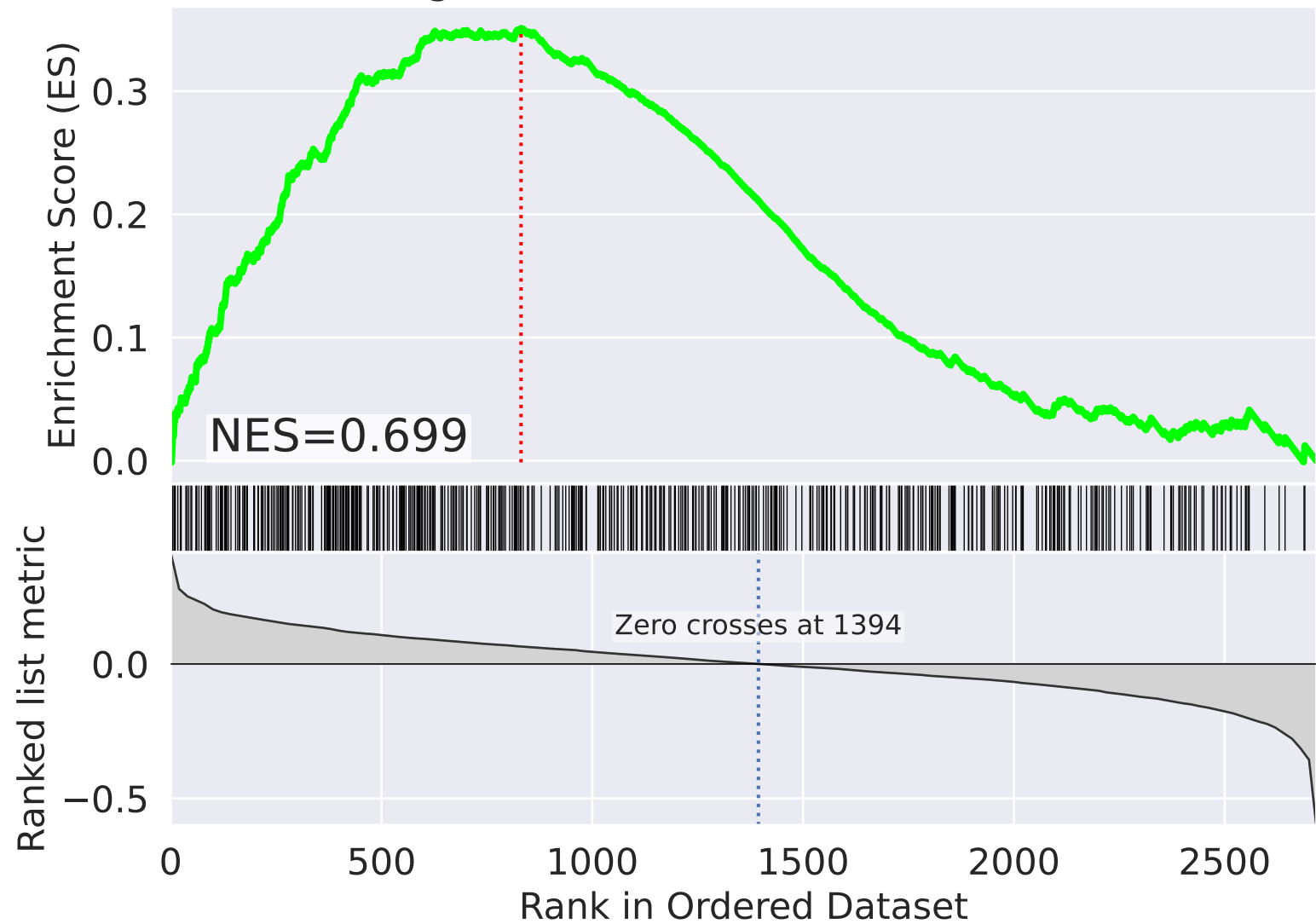
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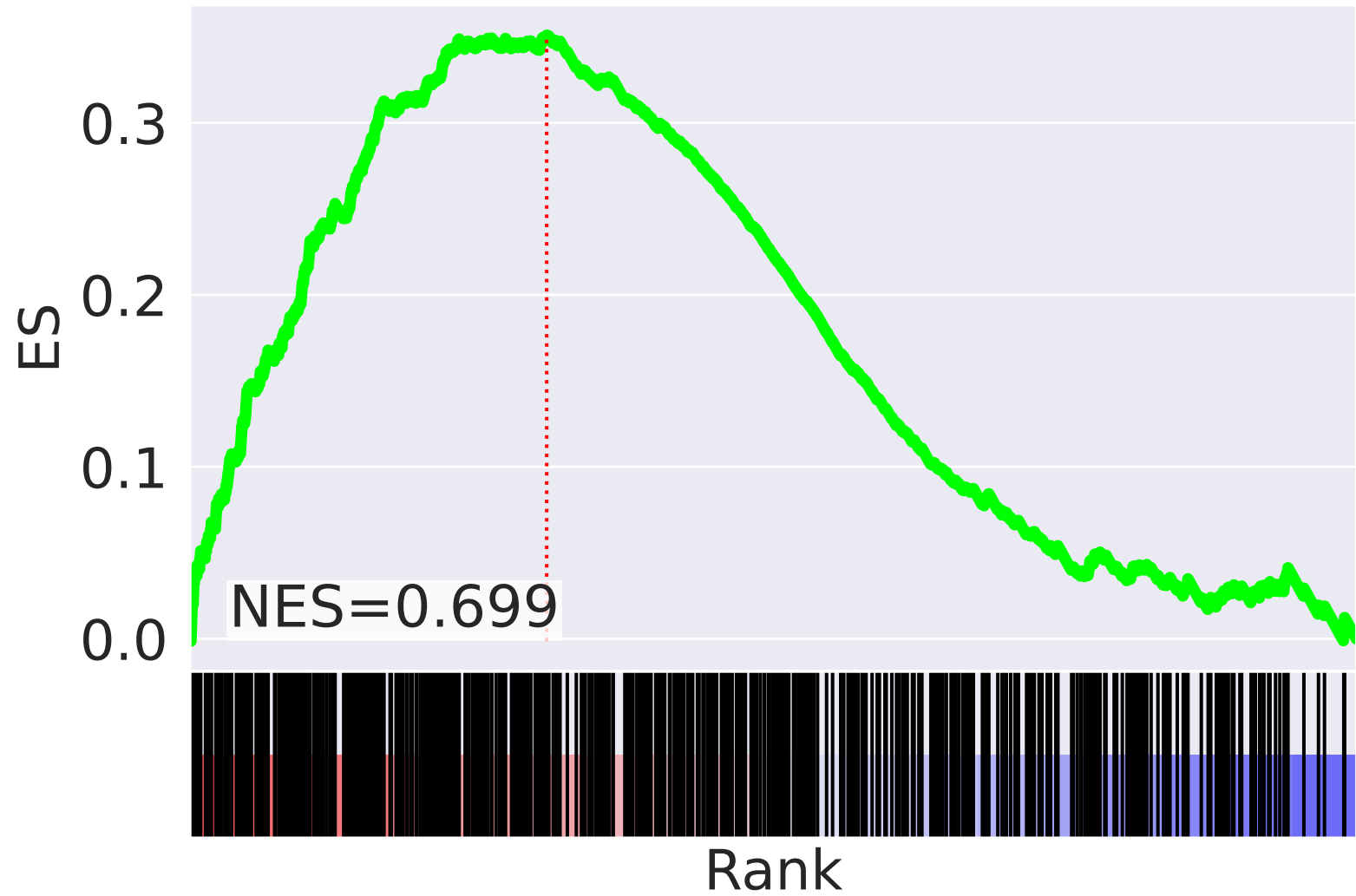
7.332		Membrane Trafficking R-HSA-199991
7.310		Vesicle-mediated Transport R-HSA-5653656
5.627		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
5.397		HIV Infection R-HSA-162906
5.367		Mitotic Metaphase And Anaphase R-HSA-2555396
5.346		M Phase R-HSA-68886
5.283		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
5.272		Mitotic Anaphase R-HSA-68882
5.180		mRNA Splicing R-HSA-72172
5.134		Separation Of Sister Chromatids R-HSA-2467813
5.059		Intra-Golgi And Retrograde Golgi-to-ER Traffic R-HSA-6811442
5.006		mRNA Splicing - Major Pathway R-HSA-72163
4.944		Regulation Of APC/C Activators Between G1/S And Early Anaphase R-HSA-176408
4.925		Transport To Golgi And Subsequent Modification R-HSA-948021
4.894		Adaptive Immune System R-HSA-1280218

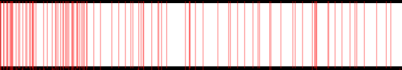
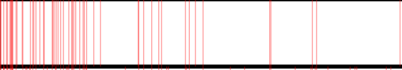
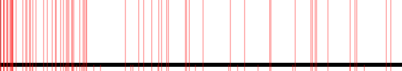
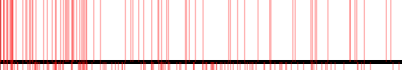
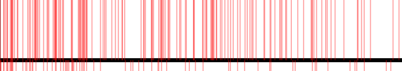
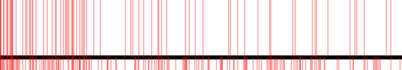
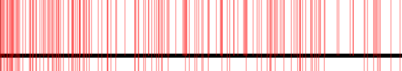
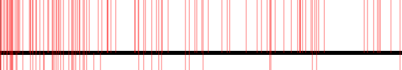
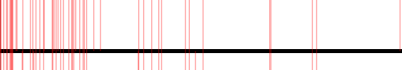
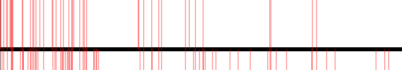
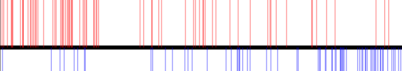
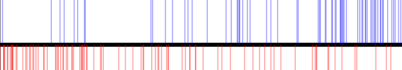
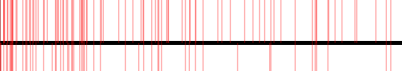
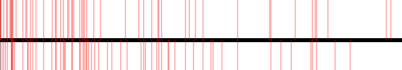
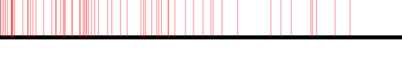
The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=30$

Signal Transduction R-HSA-162582



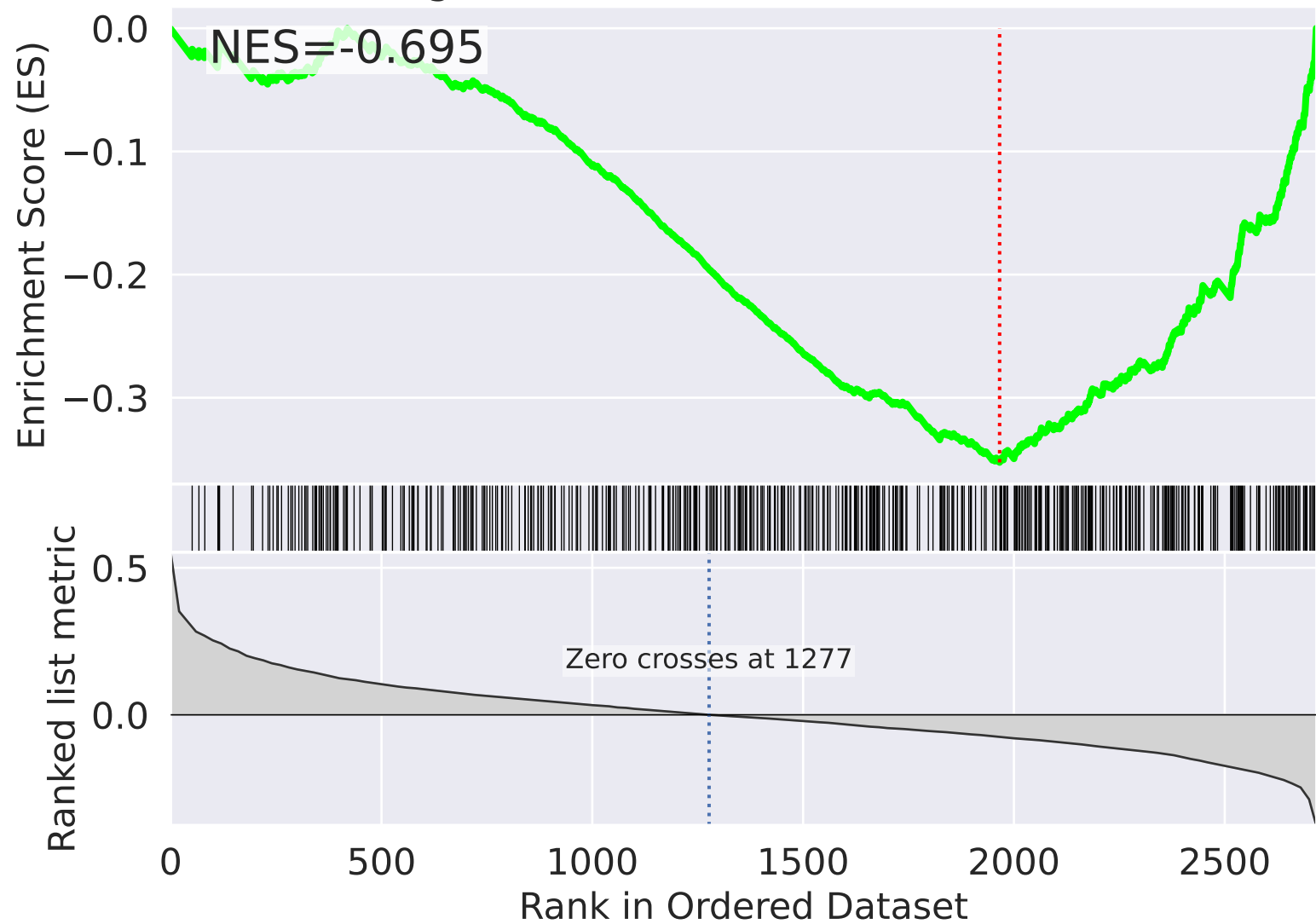
Signal Transduction R-HSA-162582



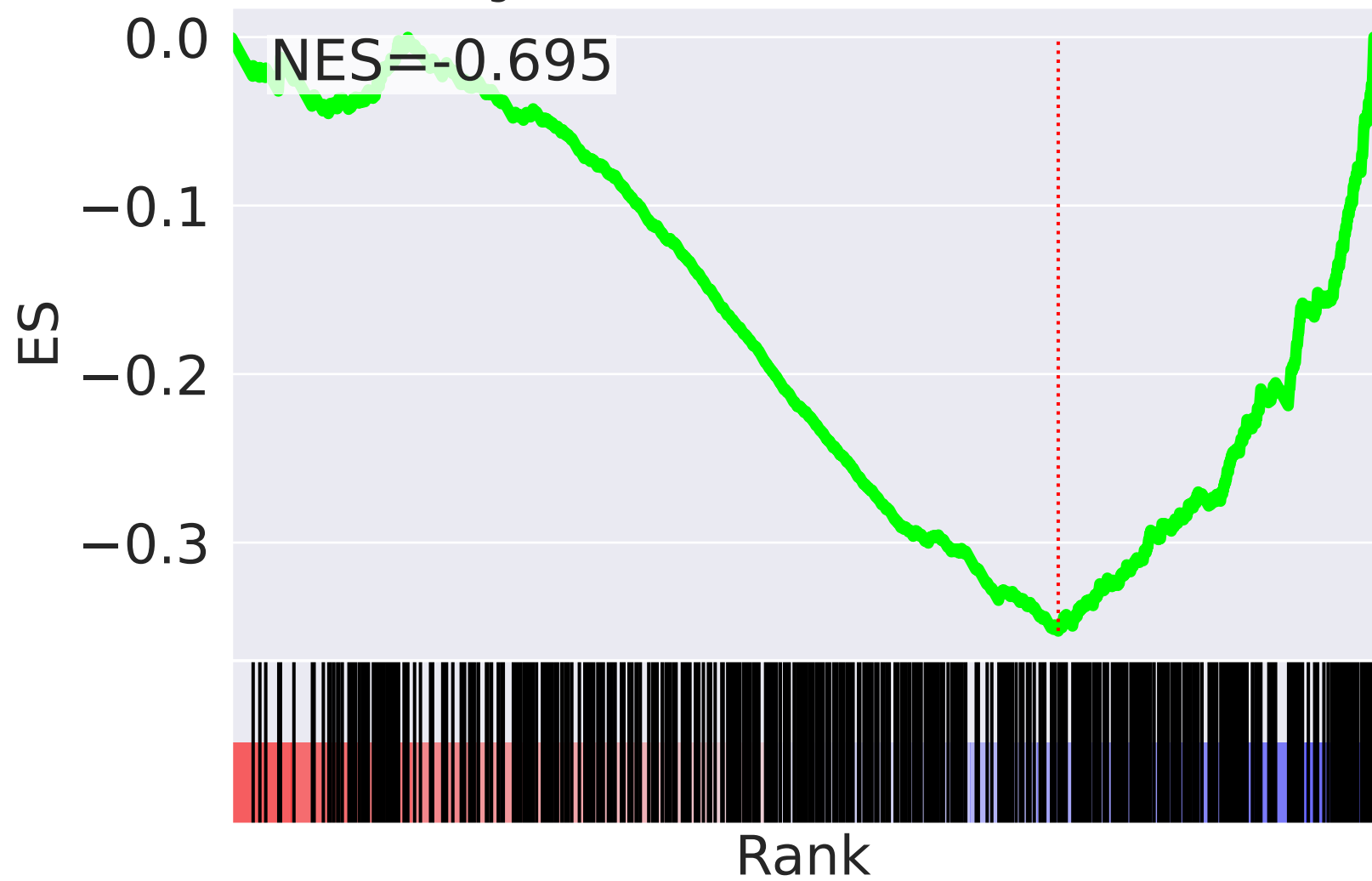
NES		SET
5.956		S Phase R-HSA-69242
5.839		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
5.746		DNA Replication Pre-Initiation R-HSA-69002
5.746		DNA Replication R-HSA-69306
5.672		Diseases Of Signal Transduction By Growth Factor Receptors And Second Messengers R-HSA-5663202
5.628		Synthesis Of DNA R-HSA-69239
5.620		M Phase R-HSA-68886
5.583		Separation Of Sister Chromatids R-HSA-2467813
5.572		Regulation Of APC/C Activators Between G1/S And Early Anaphase R-HSA-176408
5.567		APC/C:Cdh1 Mediated Degradation Of Cdc20 And APC/C:Cdh1 Targets In Late Mitosis/Early G1 R-HSA-174178
5.526		Ub-specific Processing Proteases R-HSA-5689880
-5.489		rRNA Processing R-HSA-72312
5.476		Mitotic G1 Phase And G1/S Transition R-HSA-453279
5.450		Switching Of Origins To A Post-Replicative State R-HSA-69052
5.436		TCF Dependent Signaling In Response To WNT R-HSA-201681

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=31$

Signal Transduction R-HSA-162582




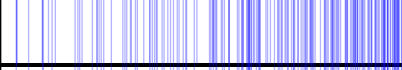
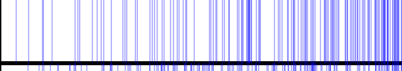
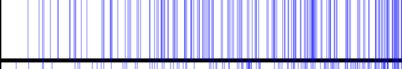
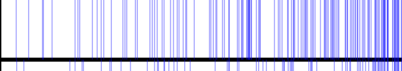
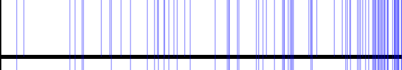
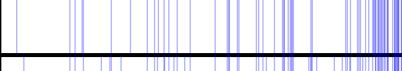
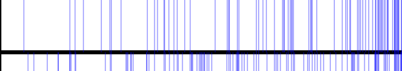
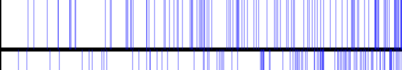
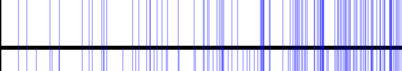
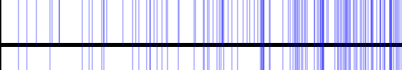
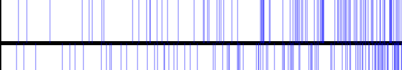
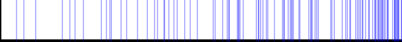


Signal Transduction R-HSA-162582



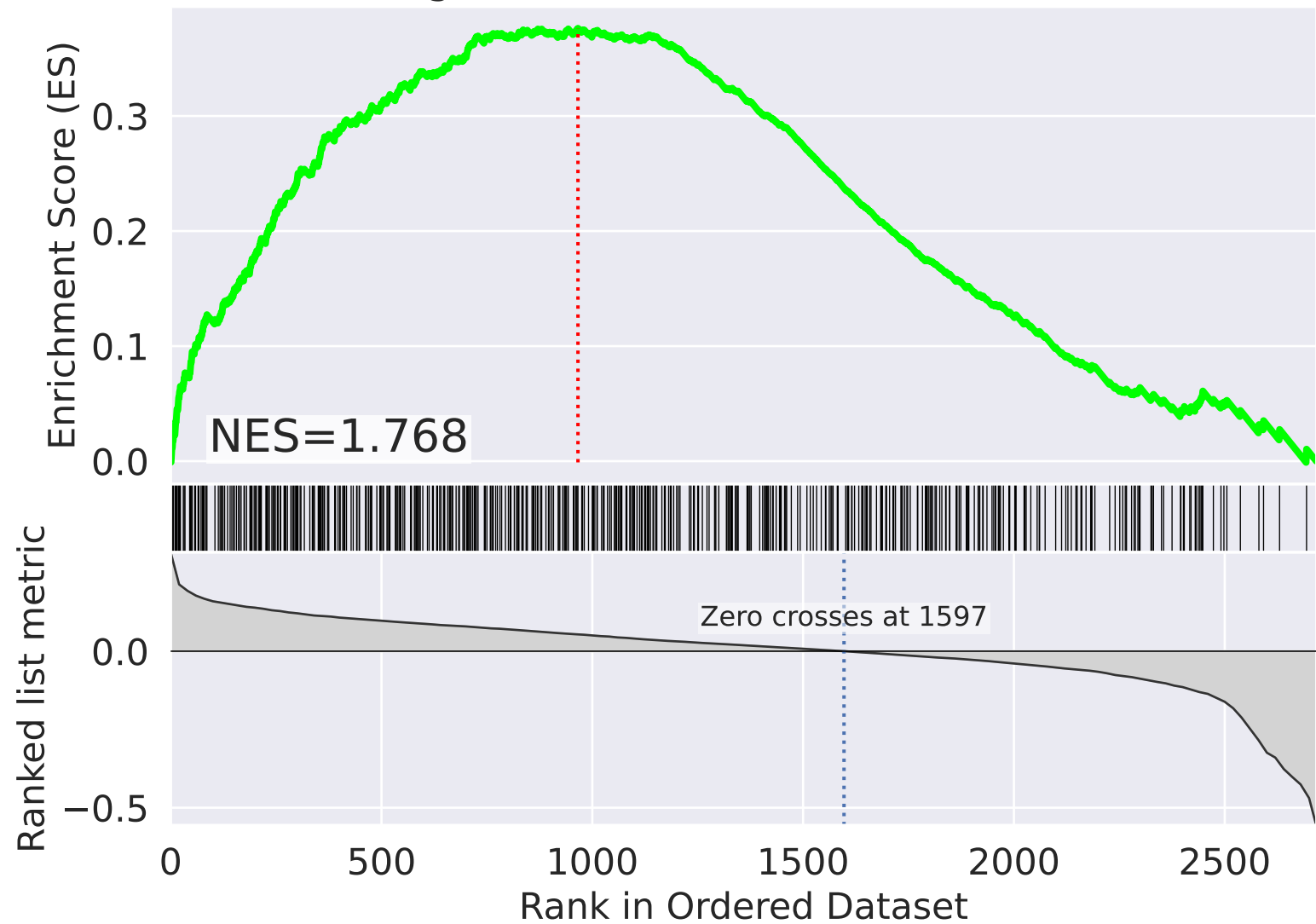
NES

SET

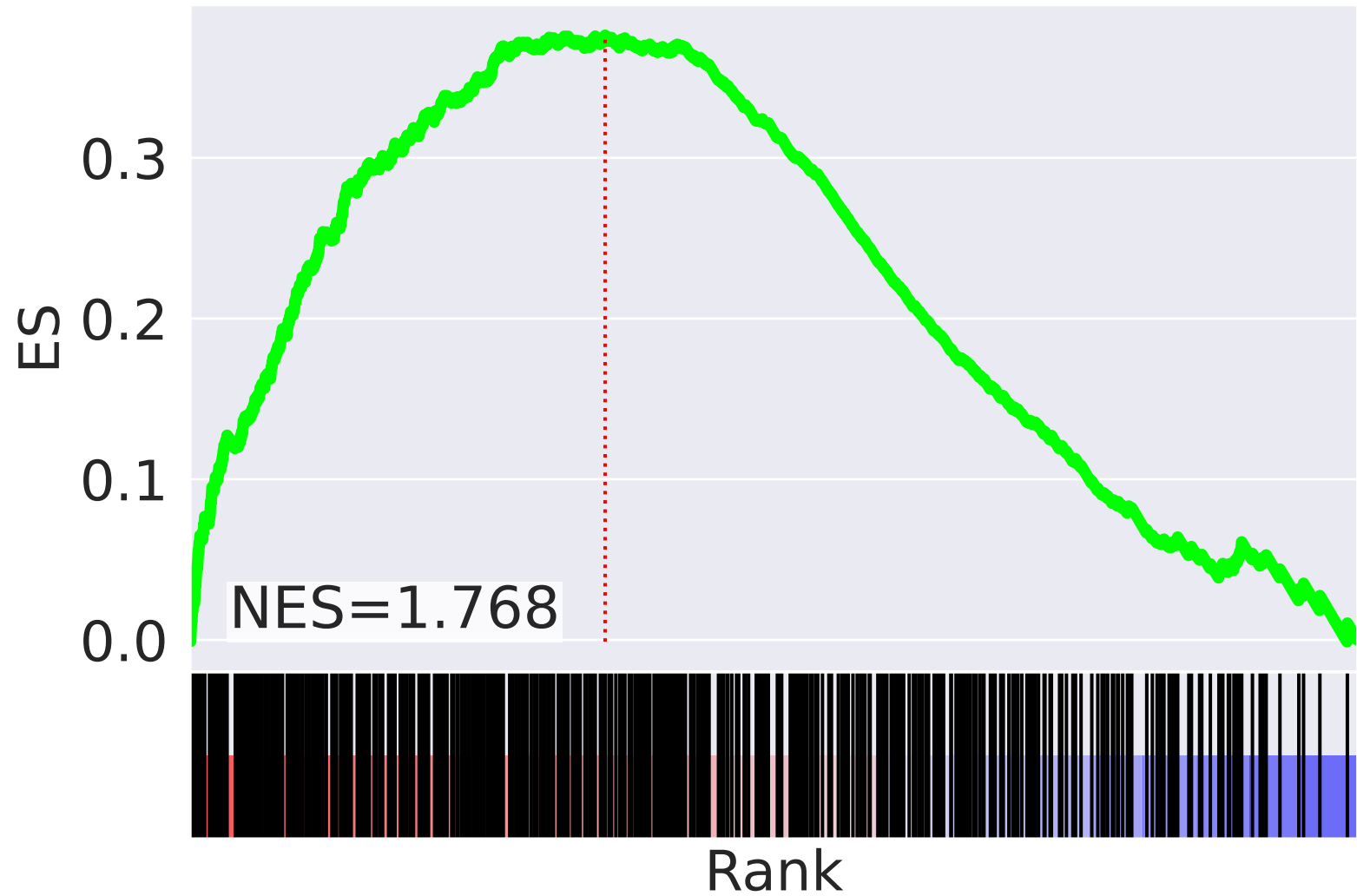
7.973		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
7.661		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
7.015		Respiratory Electron Transport R-HSA-611105
-6.441		M Phase R-HSA-68886
-6.384		Mitotic Metaphase And Anaphase R-HSA-2555396
-6.349		Adaptive Immune System R-HSA-1280218
-6.318		Mitotic Anaphase R-HSA-68882
-6.231		DNA Replication R-HSA-69306
-6.214		DNA Replication Pre-Initiation R-HSA-69002
-6.172		Synthesis Of DNA R-HSA-69239
-6.158		Nervous System Development R-HSA-9675108
-6.136		mRNA Splicing R-HSA-72172
-6.112		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
-6.099		mRNA Splicing - Major Pathway R-HSA-72163
-6.082		S Phase R-HSA-69242


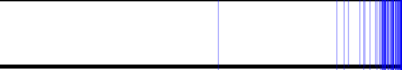


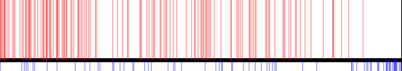
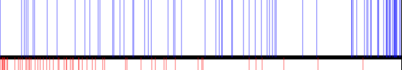
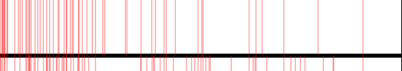
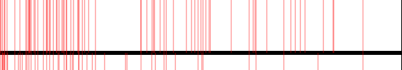
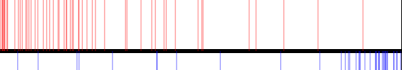

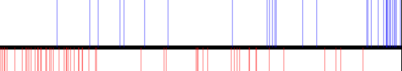
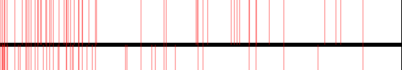



The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=32$

Signal Transduction R-HSA-162582



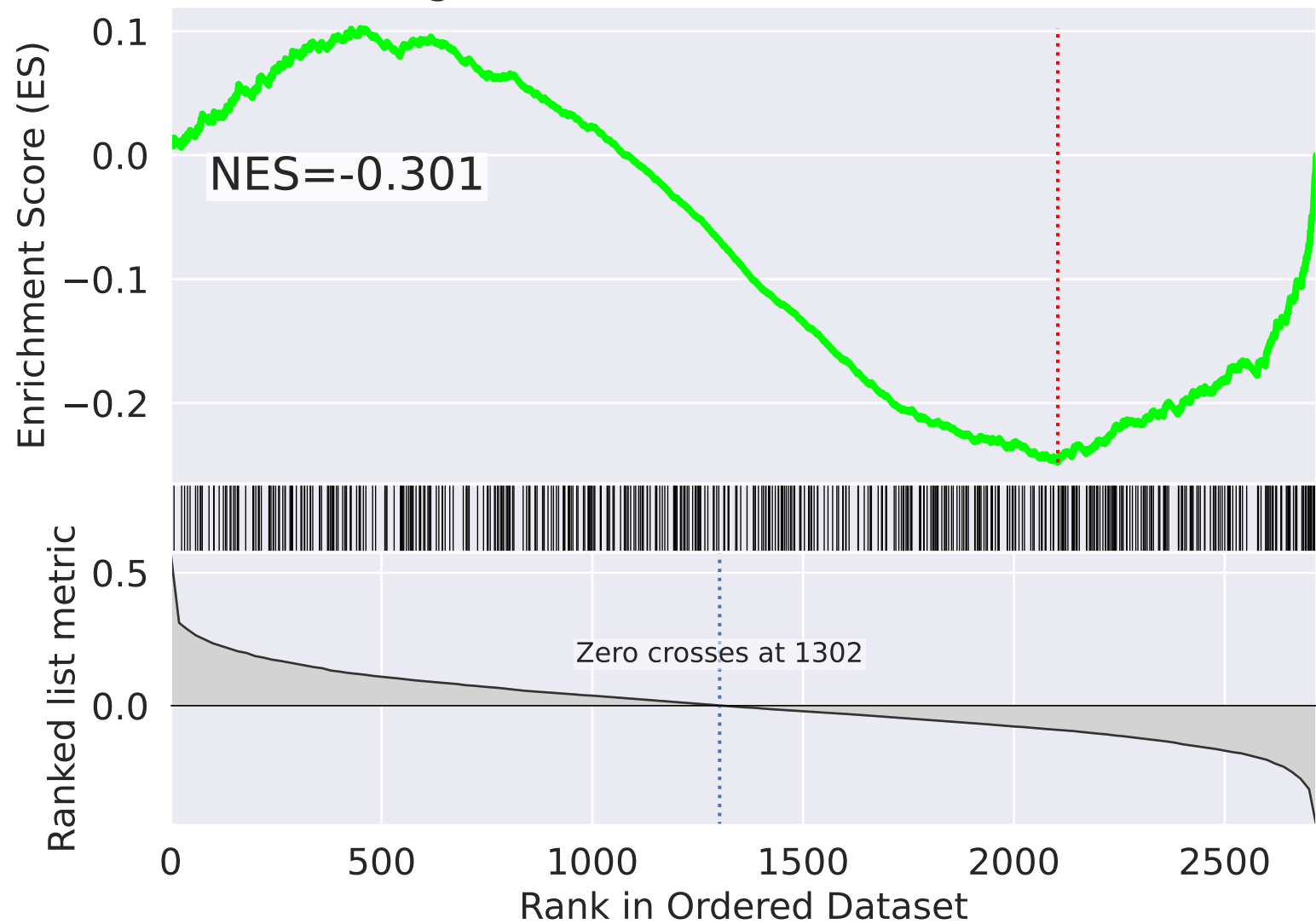
Signal Transduction R-HSA-162582



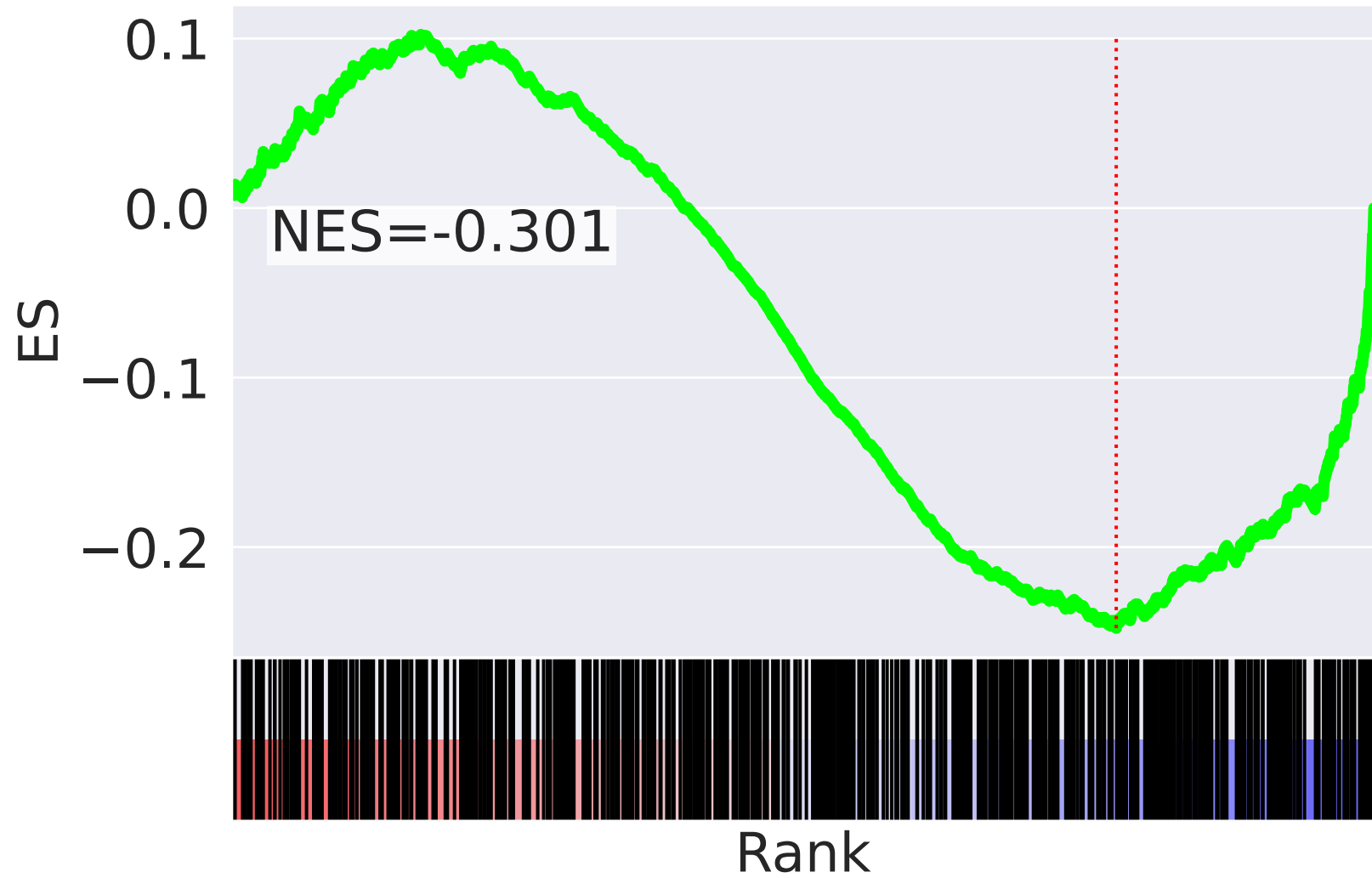
NES		SET
-6.586		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
-6.449		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
-6.198		Respiratory Electron Transport R-HSA-611105
-5.391		Complex I Biogenesis R-HSA-6799198
4.517		HIV Infection R-HSA-162906
-4.438		Translation R-HSA-72766
4.288		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
4.254		Host Interactions Of HIV Factors R-HSA-162909
4.240		Regulation Of APC/C Activators Between G1/S And Early Anaphase R-HSA-176408
-4.238		Mitochondrial Biogenesis R-HSA-1592230
-4.217		tRNA Aminoacylation R-HSA-379724
4.198		C-type Lectin Receptors (CLRs) R-HSA-5621481
4.179		Activation Of APC/C And APC/C:Cdc20 Mediated Degradation Of Mitotic Proteins R-HSA-176814
4.168		APC/C:Cdh1 Mediated Degradation Of Cdc20 And APC/C:Cdh1 Targets In Late Mitosis/Early G1 R-HSA-174178
4.149		Cdc20:Phospho-APC/C Mediated Degradation Of Cyclin A R-HSA-174184




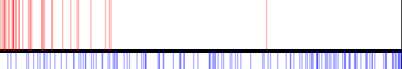
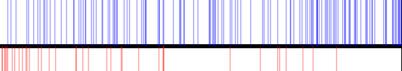

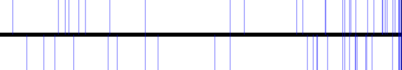


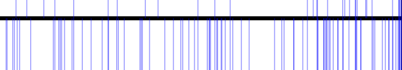
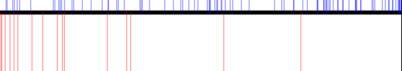
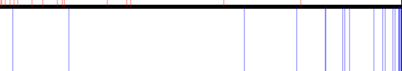
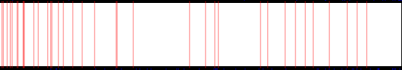
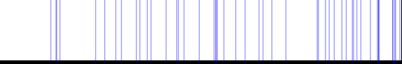

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=33$

Signal Transduction R-HSA-162582



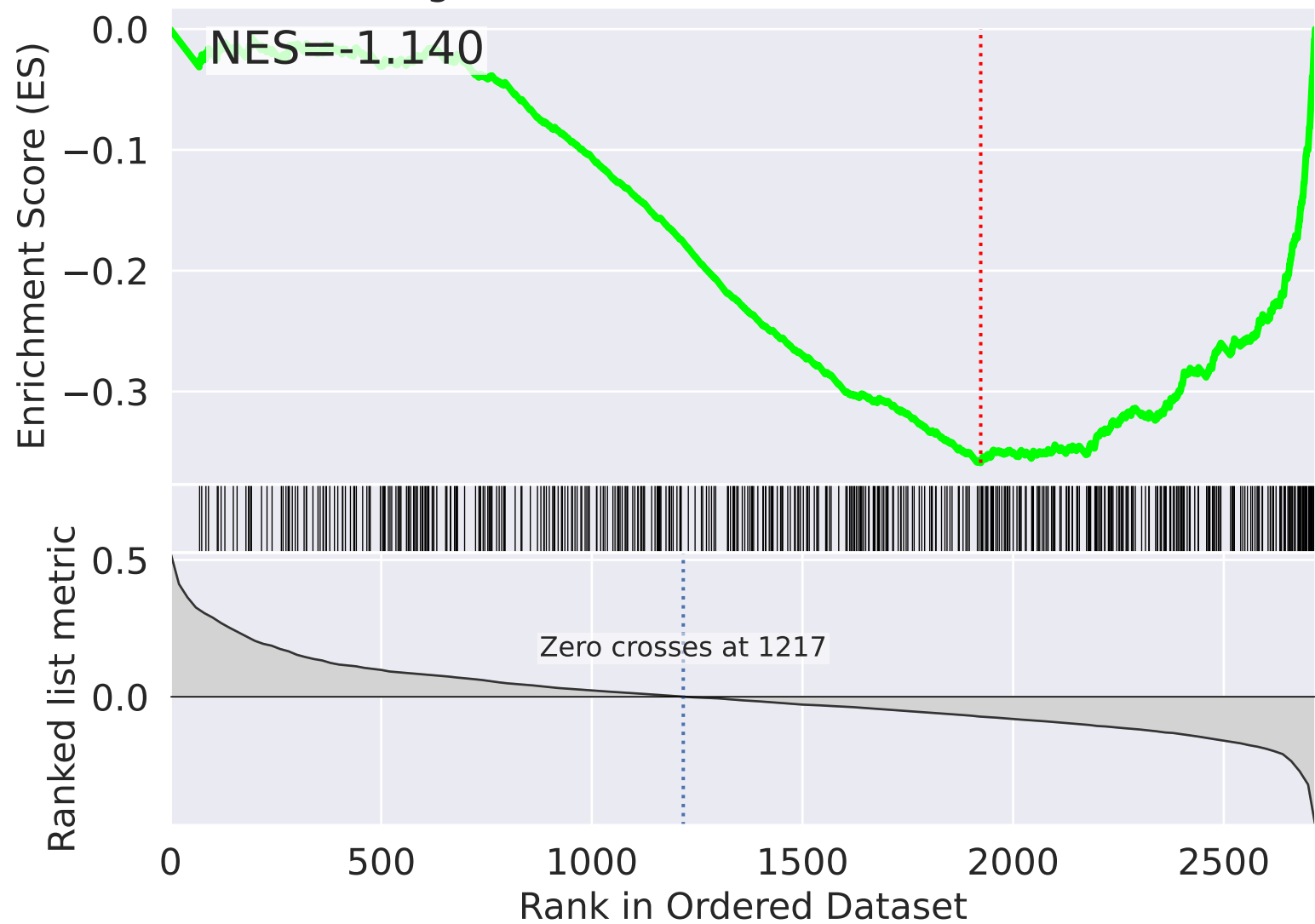
Signal Transduction R-HSA-162582



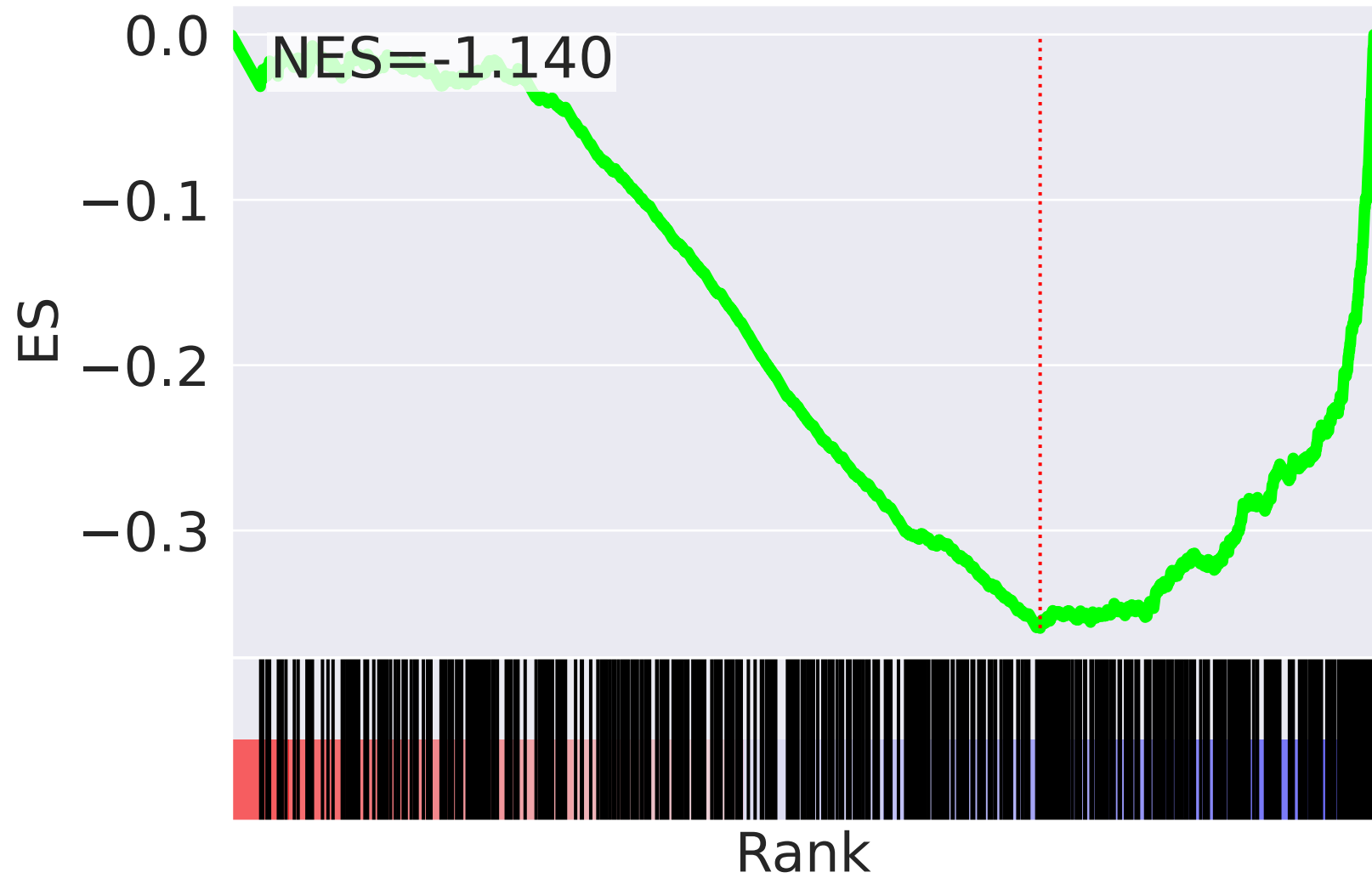
NES		SET
7.488		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
7.416		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
6.830		Respiratory Electron Transport R-HSA-611105
5.234		Complex I Biogenesis R-HSA-6799198
-4.498		Signaling By Receptor Tyrosine Kinases R-HSA-9006934
4.273		Mitochondrial Biogenesis R-HSA-1592230
-4.139		Leishmania Infection R-HSA-9658195
-4.010		VEGFA-VEGFR2 Pathway R-HSA-4420097
-3.933		Platelet Activation, Signaling And Aggregation R-HSA-76002
-3.829		Signaling By VEGF R-HSA-194138
-3.704		Hemostasis R-HSA-109582
3.692		Mitochondrial tRNA Aminoacylation R-HSA-379726
-3.604		FCGR3A-mediated Phagocytosis R-HSA-9664422
3.572		TP53 Regulates Metabolic Genes R-HSA-5628897
-3.556		Mitotic Prophase R-HSA-68875

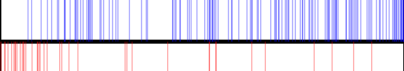
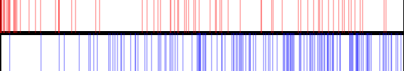
The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=34$

Signal Transduction R-HSA-162582



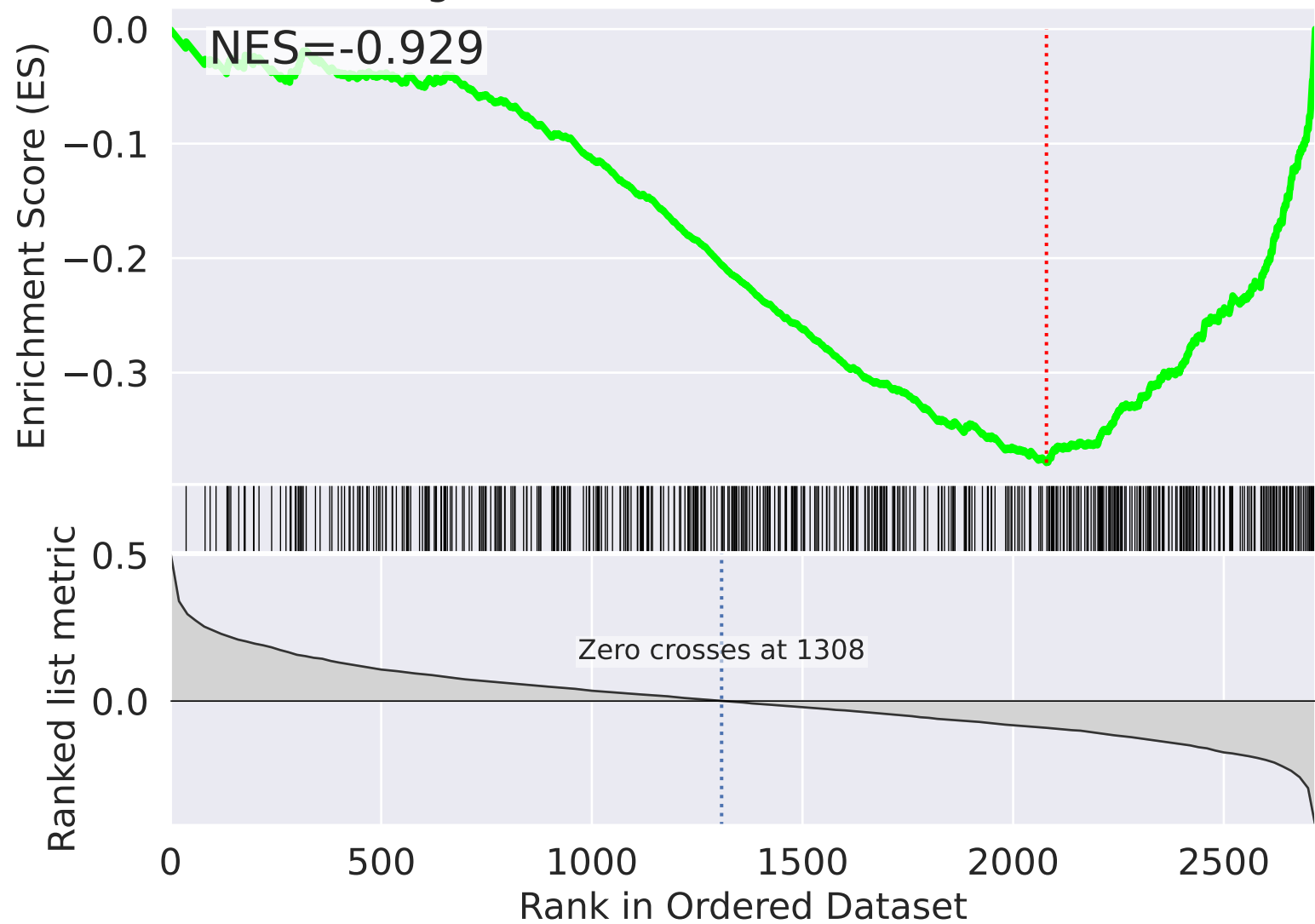
Signal Transduction R-HSA-162582



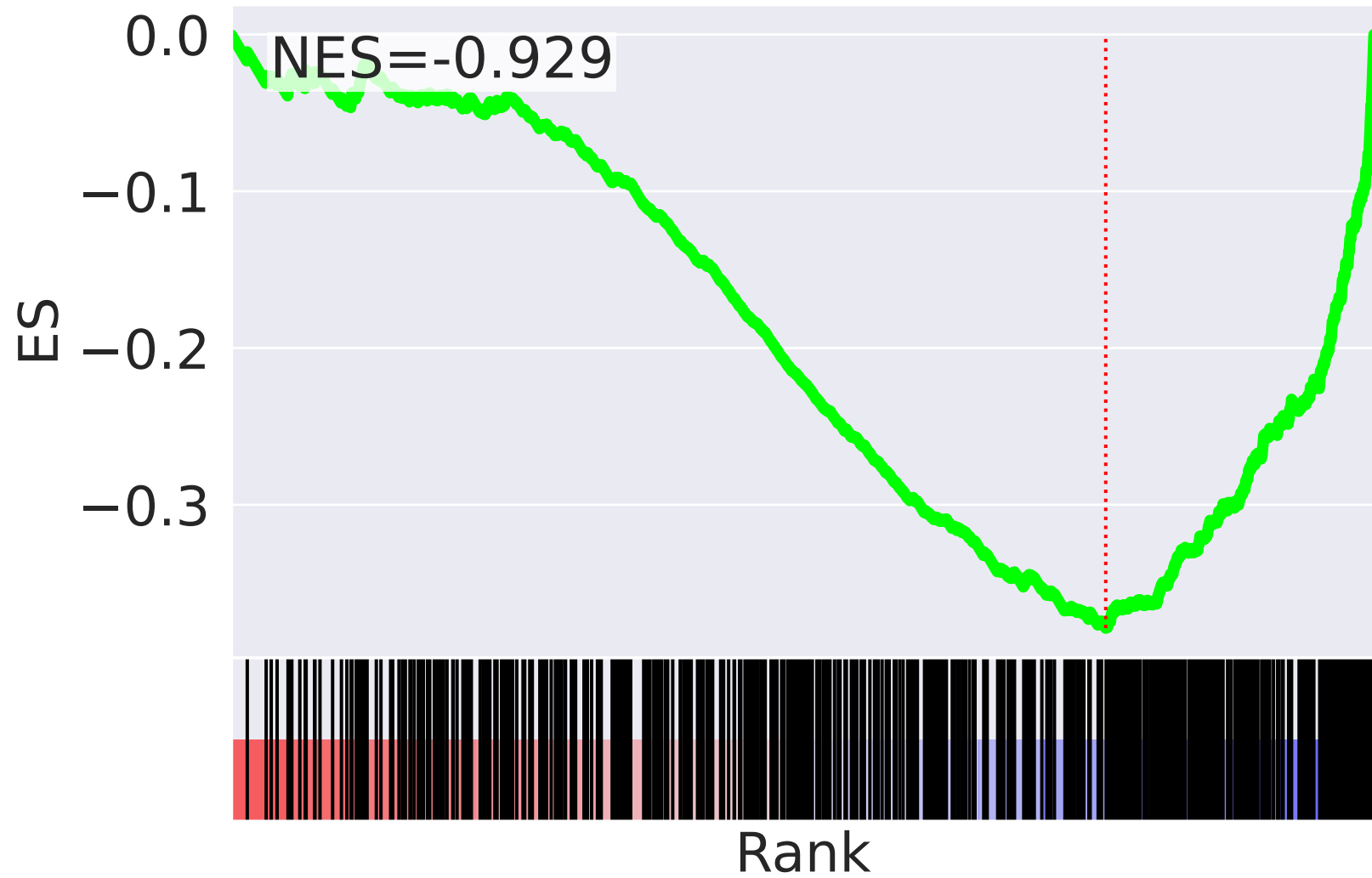
NES		SET
7.504		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
7.487		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
6.931		Respiratory Electron Transport R-HSA-611105
5.823		Complex I Biogenesis R-HSA-6799198
4.701		tRNA Aminoacylation R-HSA-379724
-4.635		M Phase R-HSA-68886
-4.612		Signaling By Receptor Tyrosine Kinases R-HSA-9006934
4.600		Mitochondrial Biogenesis R-HSA-1592230
4.593		Translation R-HSA-72766
-4.518		Mitotic Metaphase And Anaphase R-HSA-2555396
-4.453		MAPK Family Signaling Cascades R-HSA-5683057
-4.443		Mitotic Anaphase R-HSA-68882
-4.386		Nervous System Development R-HSA-9675108
-4.343		VEGFA-VEGFR2 Pathway R-HSA-4420097
-4.328		Adaptive Immune System R-HSA-1280218



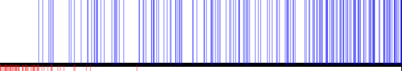

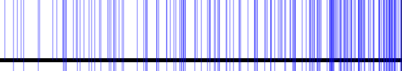
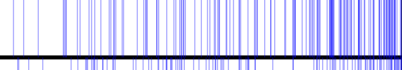
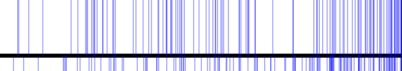
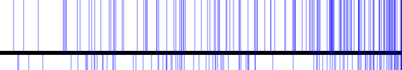
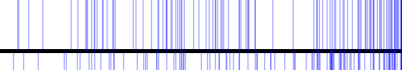
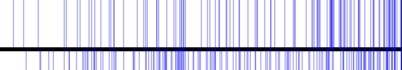
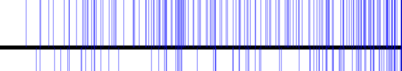
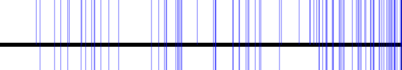
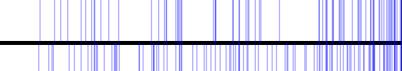
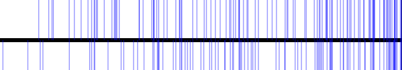

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=35$

Signal Transduction R-HSA-162582



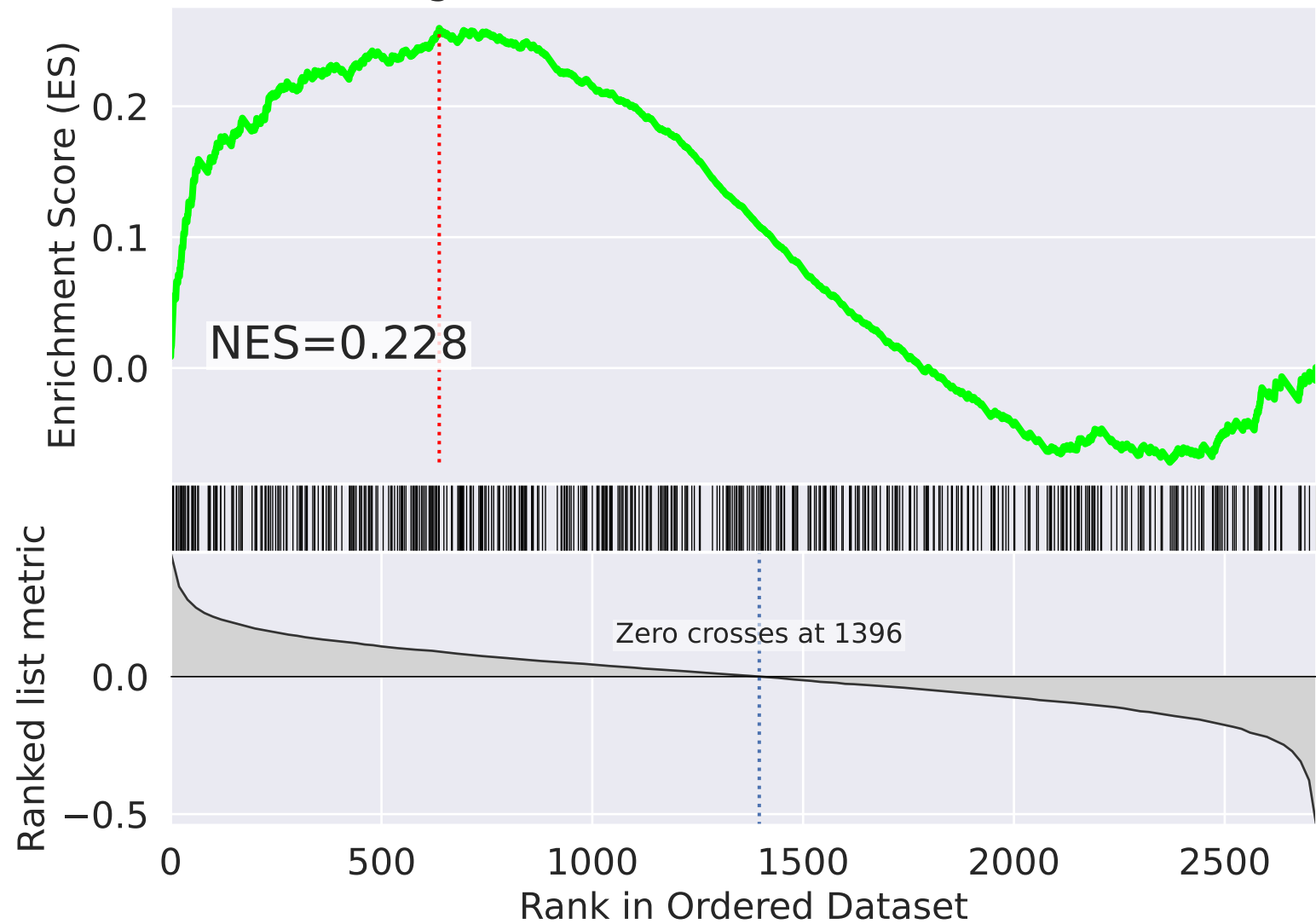
Signal Transduction R-HSA-162582



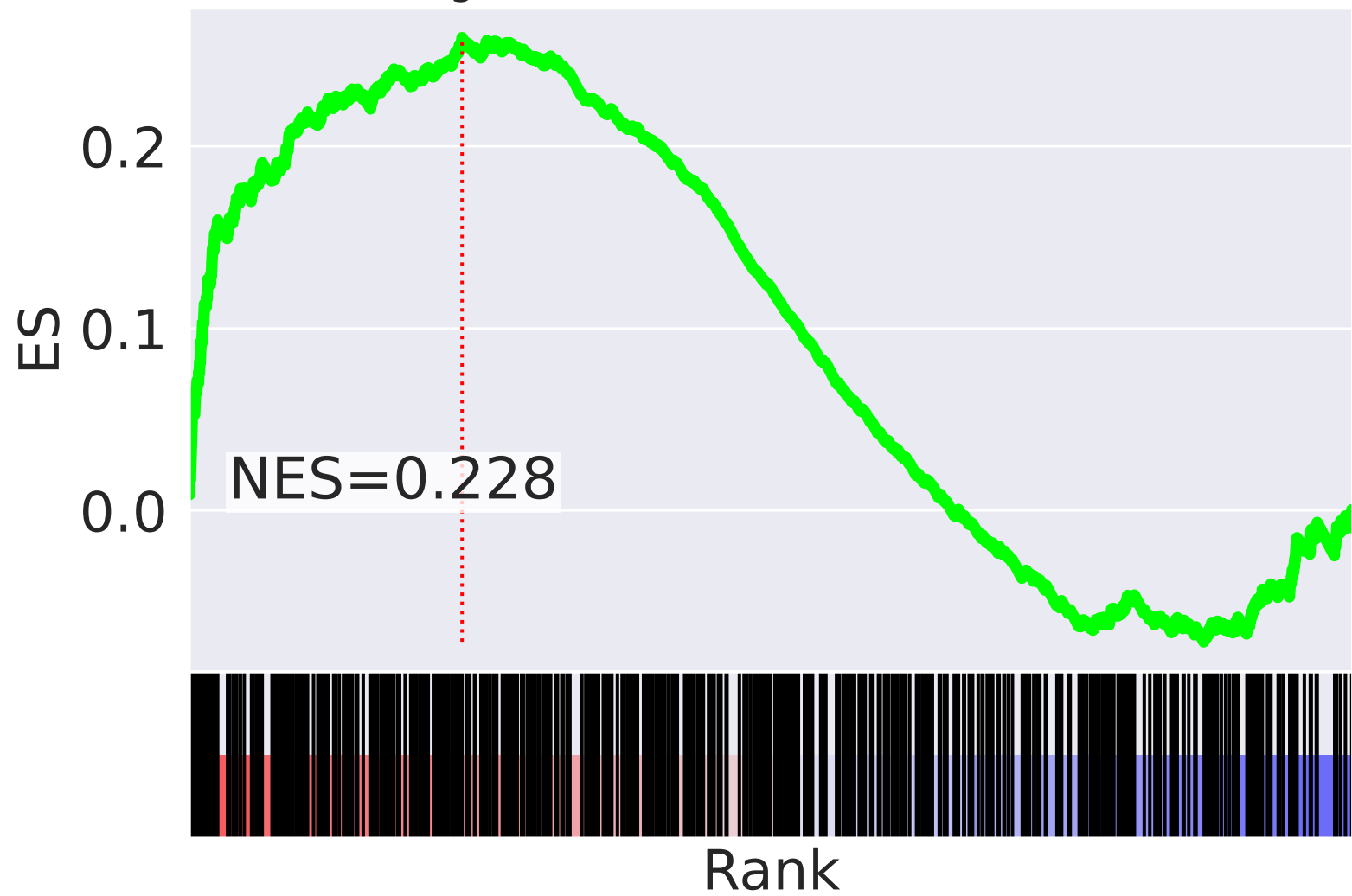
NES		SET
8.041		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
7.758		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
-7.444		Adaptive Immune System R-HSA-1280218
7.092		Respiratory Electron Transport R-HSA-611105
-6.921		M Phase R-HSA-68886
-6.740		Mitotic Metaphase And Anaphase R-HSA-2555396
-6.672		Nervous System Development R-HSA-9675108
-6.666		Mitotic Anaphase R-HSA-68882
-6.560		Axon Guidance R-HSA-422475
-6.341		Separation Of Sister Chromatids R-HSA-2467813
-6.211		Cytokine Signaling In Immune System R-HSA-1280215
-6.053		MAPK Family Signaling Cascades R-HSA-5683057
-6.049		RAF/MAP Kinase Cascade R-HSA-5673001
-6.029		Class I MHC Mediated Antigen Processing And Presentation R-HSA-983169
-6.019		S Phase R-HSA-69242

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=36$

Signal Transduction R-HSA-162582



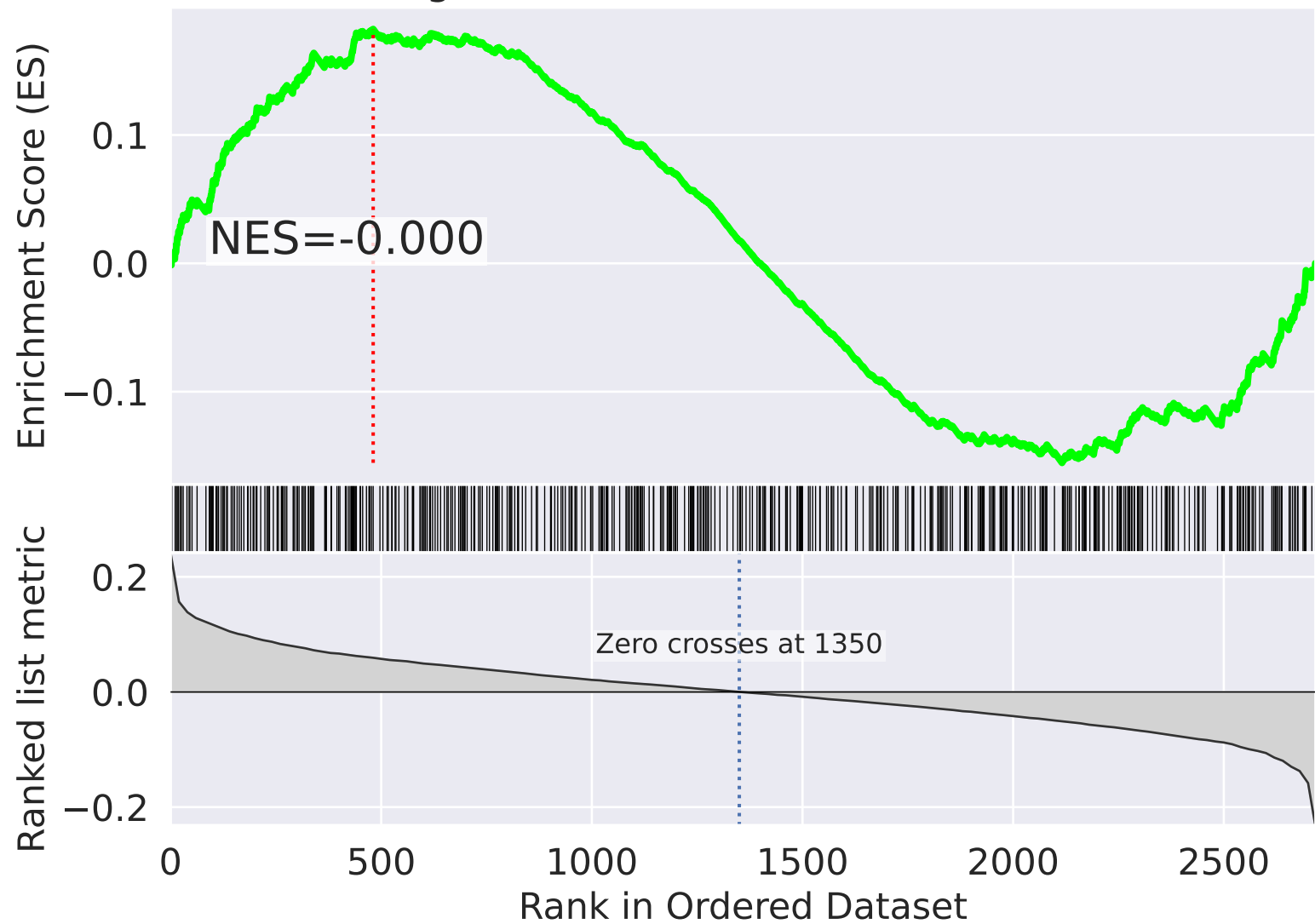
Signal Transduction R-HSA-162582



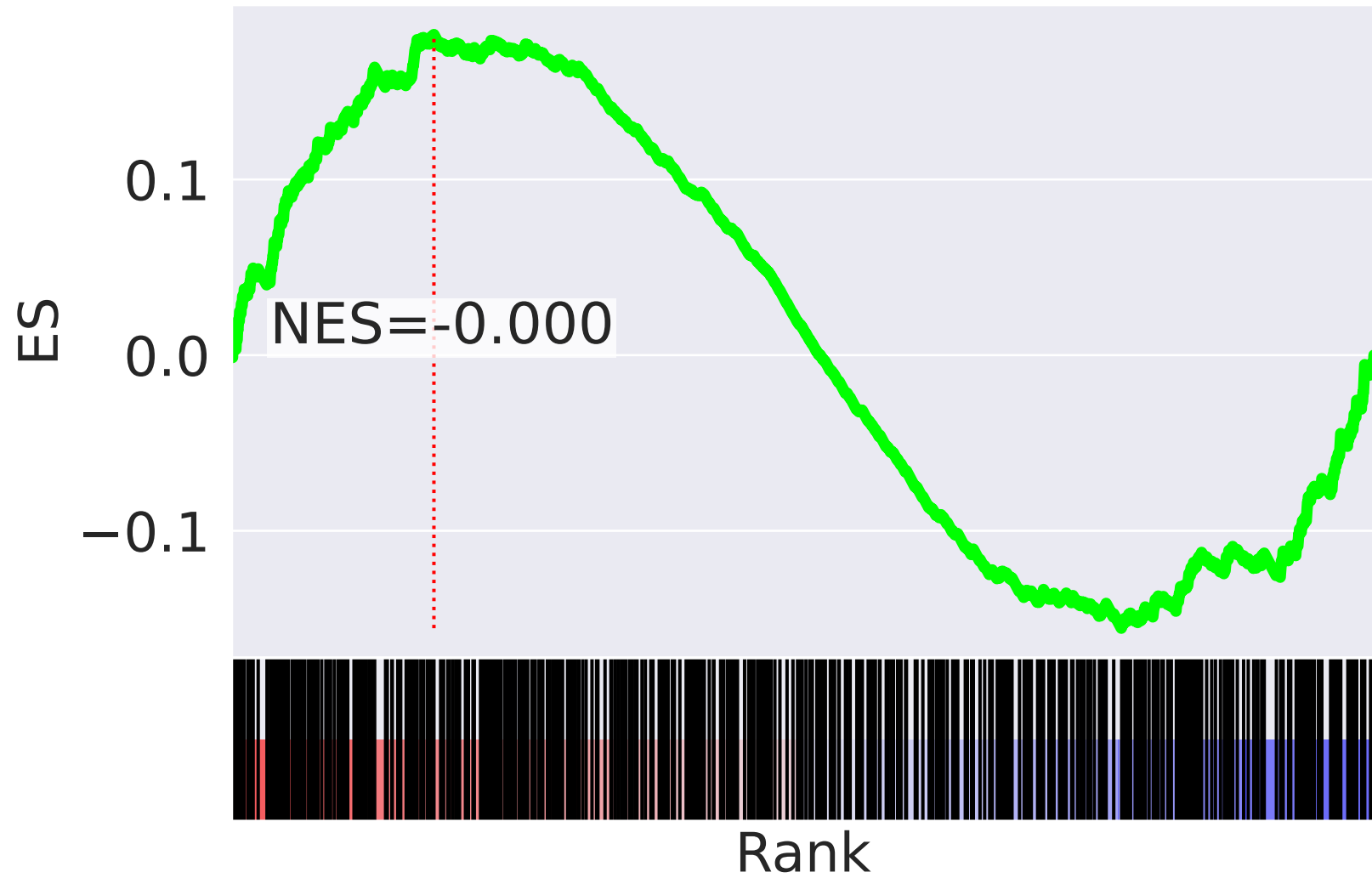
NES	SET
6.639	Mitotic Metaphase And Anaphase R-HSA-2555396
6.575	Mitotic Anaphase R-HSA-68882
6.485	M Phase R-HSA-68886
6.071	Separation Of Sister Chromatids R-HSA-2467813
5.662	Adaptive Immune System R-HSA-1280218
5.550	APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
5.436	Switching Of Origins To A Post-Replicative State R-HSA-69052
5.416	Cell Cycle Checkpoints R-HSA-69620
5.413	Mitotic G2-G2/M Phases R-HSA-453274
5.296	G2/M Transition R-HSA-69275
5.288	Regulation Of APC/C Activators Between G1/S And Early Anaphase R-HSA-176408
5.287	MAPK Family Signaling Cascades R-HSA-5683057
5.286	MAPK1/MAPK3 Signaling R-HSA-5684996
5.164	RAF/MAP Kinase Cascade R-HSA-5673001
5.133	Activation Of APC/C And APC/C:Cdc20 Mediated Degradation Of Mitotic Proteins R-HSA-176814



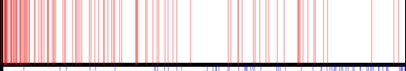
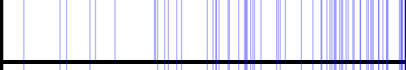
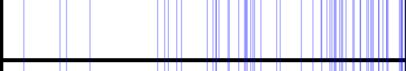
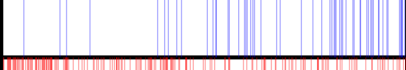
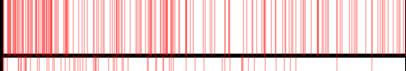
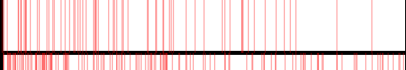
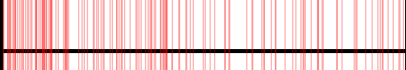
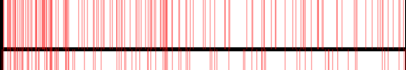
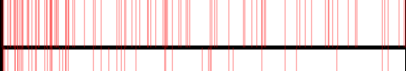
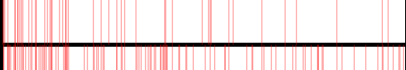
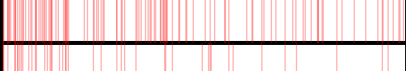


The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=37$

Signal Transduction R-HSA-162582



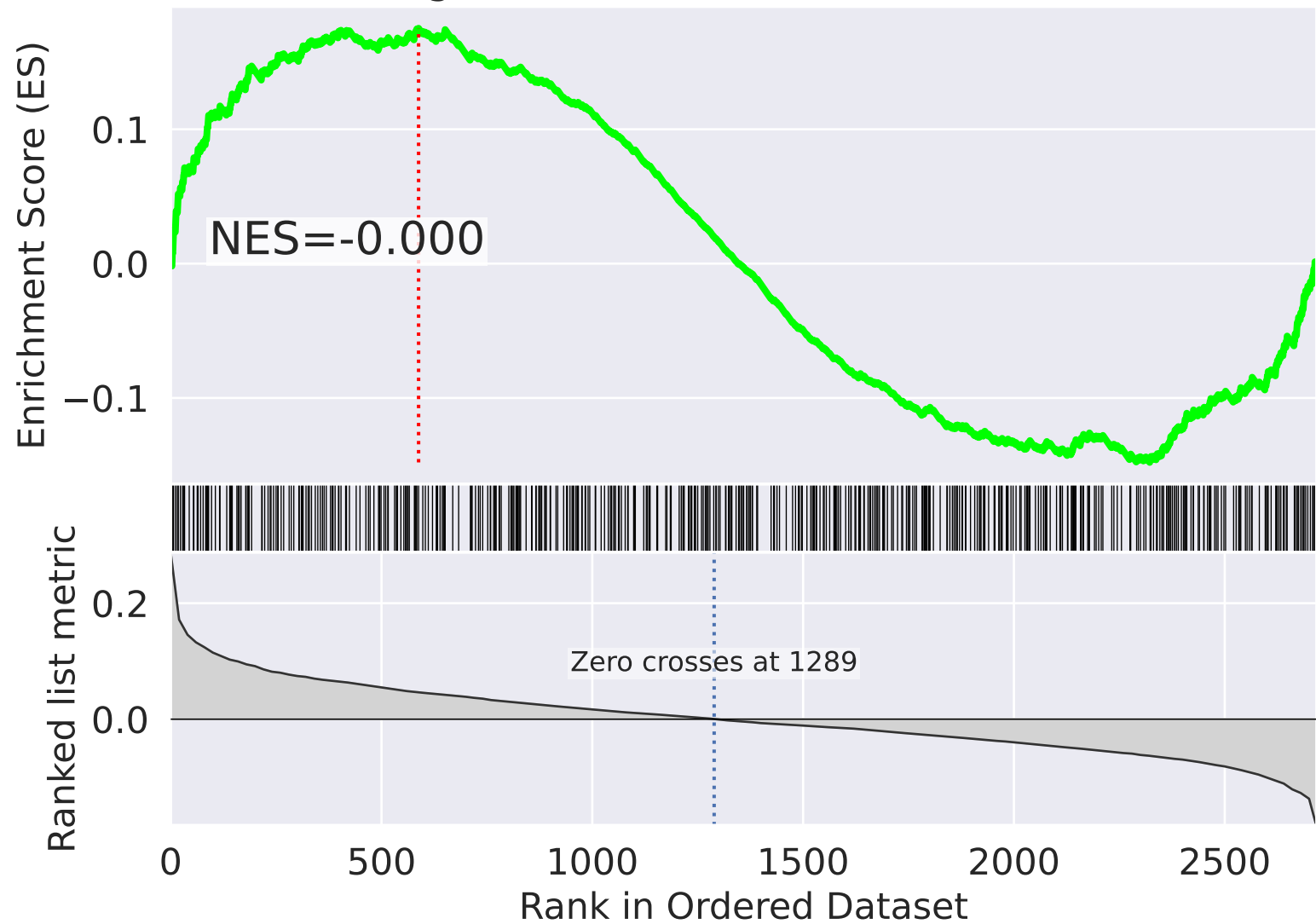
Signal Transduction R-HSA-162582



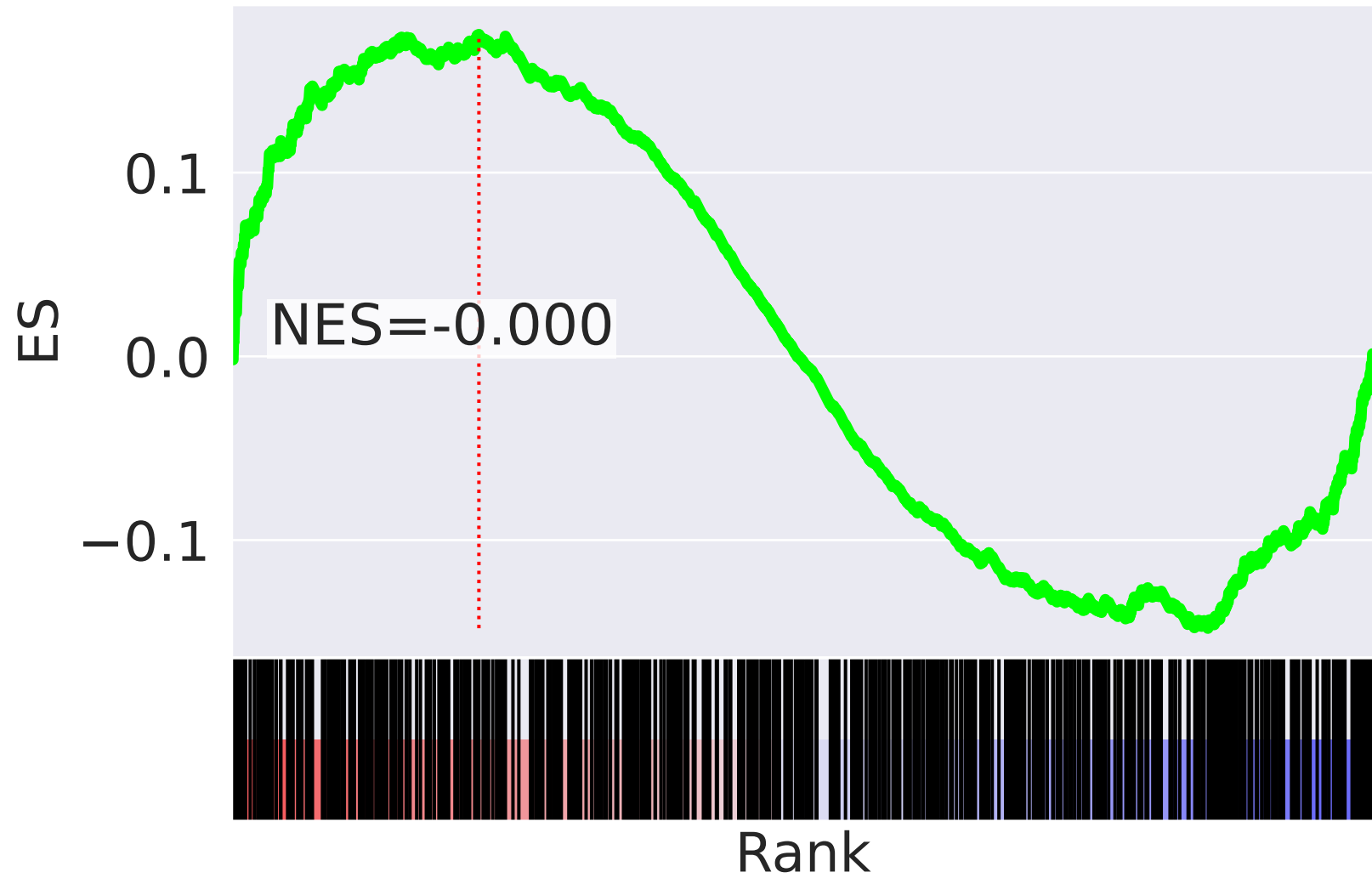
NES		SET
7.182		mRNA Splicing - Major Pathway R-HSA-72163
7.033		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
7.011		mRNA Splicing R-HSA-72172
-5.543		rRNA Processing R-HSA-72312
-5.512		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
-5.150		Major Pathway Of rRNA Processing In Nucleolus And Cytosol R-HSA-6791226
5.089		M Phase R-HSA-68886
4.824		Intra-Golgi And Retrograde Golgi-to-ER Traffic R-HSA-6811442
4.720		Mitotic Anaphase R-HSA-68882
4.720		Mitotic Metaphase And Anaphase R-HSA-2555396
4.702		G2/M Transition R-HSA-69275
4.676		Antigen processing-Cross Presentation R-HSA-1236975
4.664		Separation Of Sister Chromatids R-HSA-2467813
4.593		ER-Phagosome Pathway R-HSA-1236974
4.508		APC/C:Cdc20 Mediated Degradation Of Securin R-HSA-174154


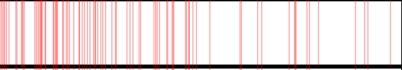
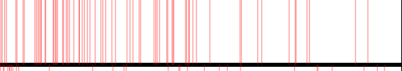
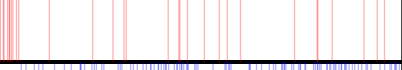


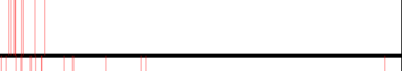


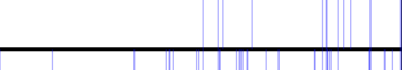
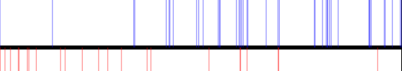
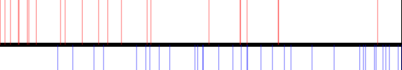
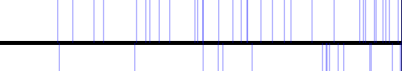
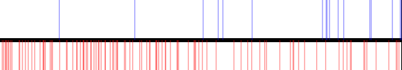

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=38$

Signal Transduction R-HSA-162582



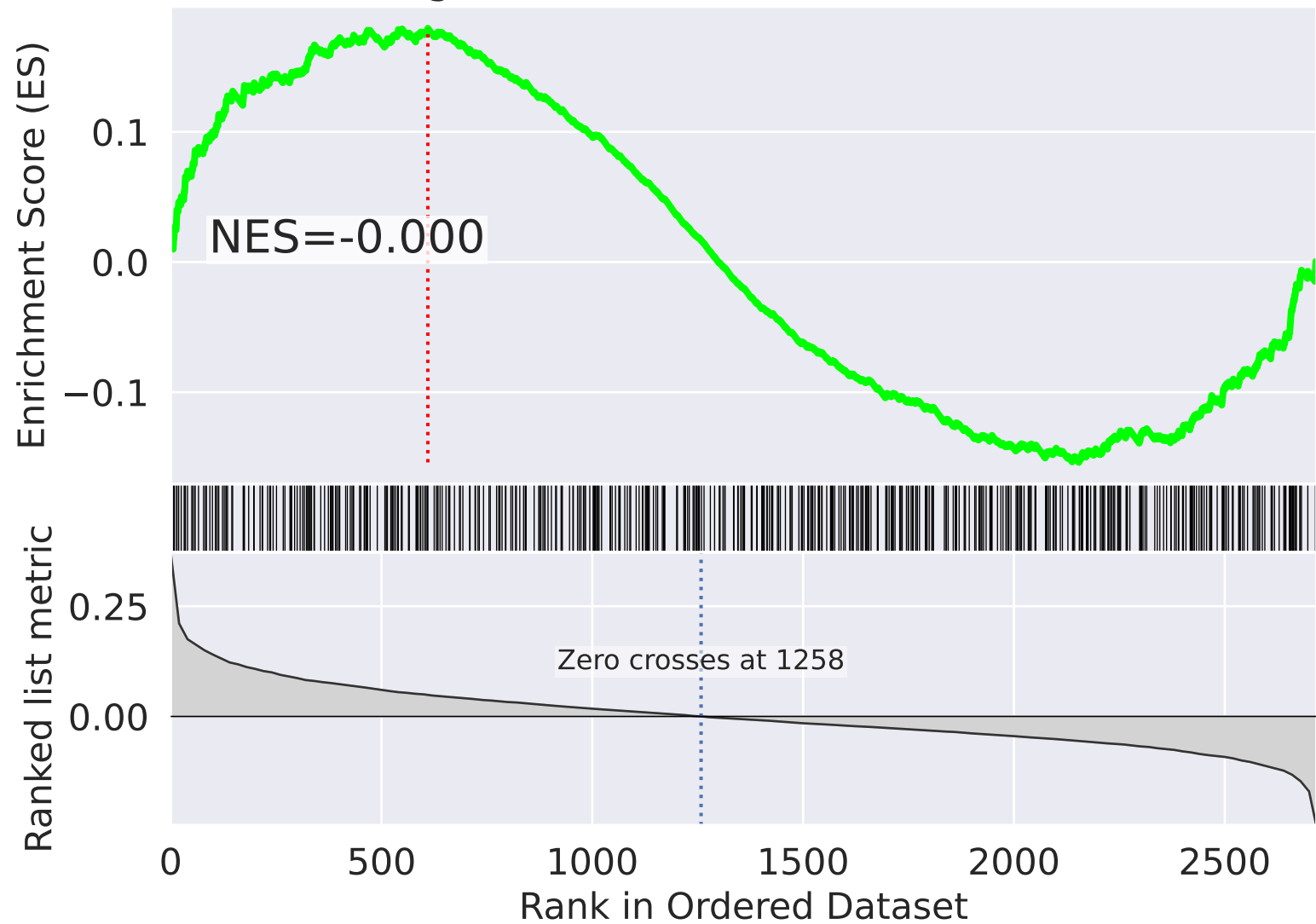
Signal Transduction R-HSA-162582



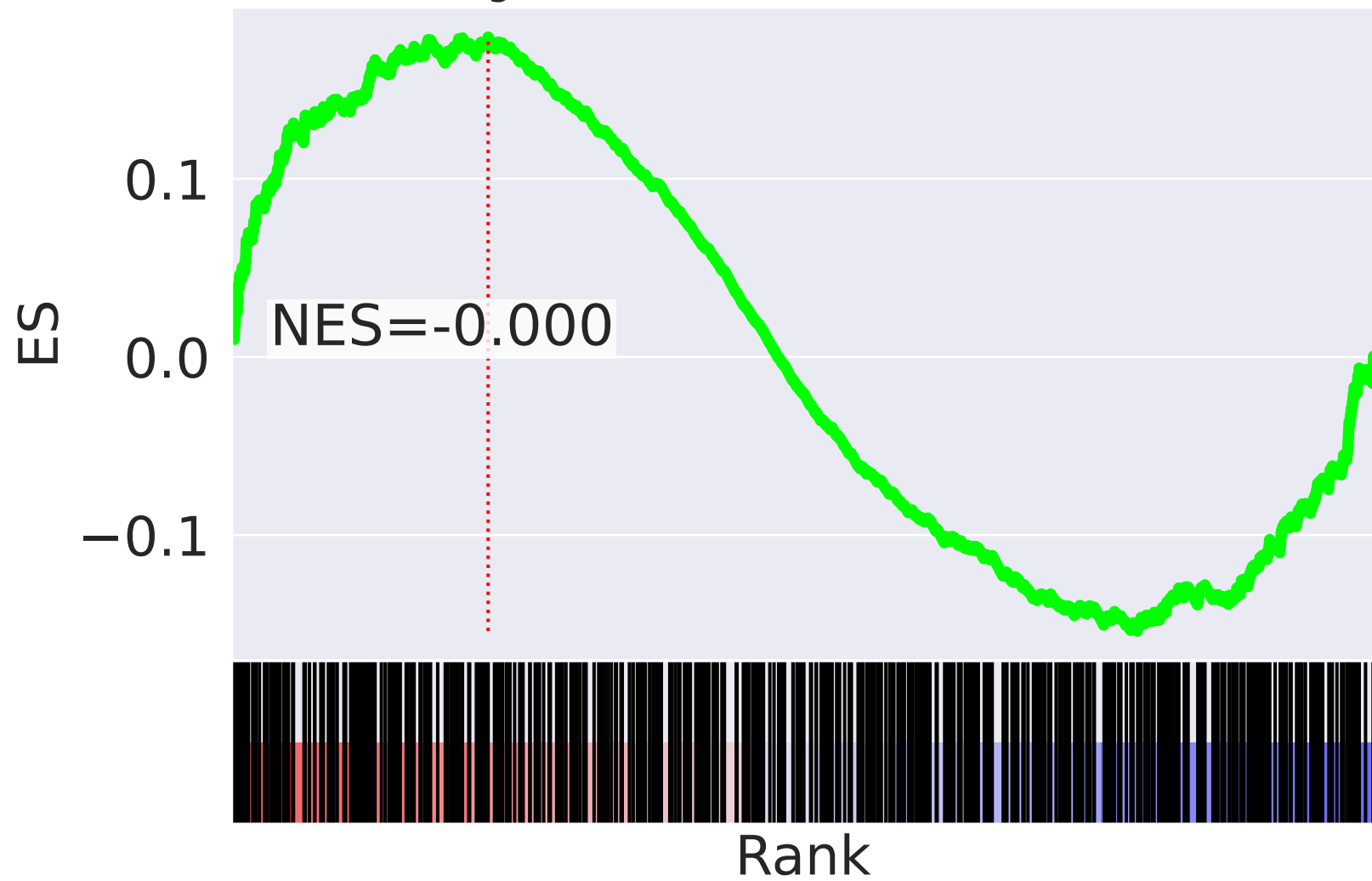
NES		SET
4.781		Respiratory Electron Transport R-HSA-611105
4.771		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
4.671		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
3.835		Metabolism Of Vitamins And Cofactors R-HSA-196854
-3.432		S Phase R-HSA-69242
3.415		Heme Biosynthesis R-HSA-189451
3.415		Metabolism Of Porphyrins R-HSA-189445
3.331		Mitochondrial tRNA Aminoacylation R-HSA-379726
-3.299		Peroxisomal Protein Import R-HSA-9033241
-3.179		Budding And Maturation Of HIV Virion R-HSA-162588
-3.163		HCMV Late Events R-HSA-9610379
3.133		Metabolism Of Nucleotides R-HSA-15869
-3.125		Leishmania Infection R-HSA-9658195
-3.071		Endosomal Sorting Complex Required For Transport (ESCRT) R-HSA-917729
3.021		Chromatin Modifying Enzymes R-HSA-3247509

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=39$

Signal Transduction R-HSA-162582




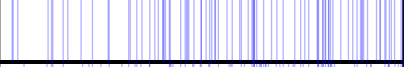
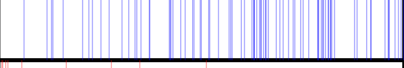
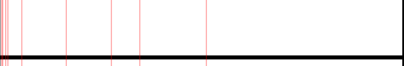

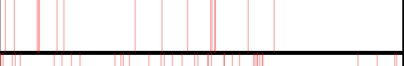
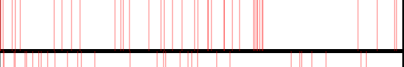
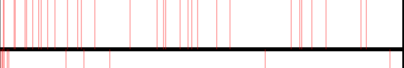
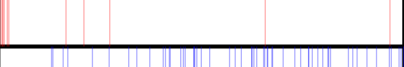
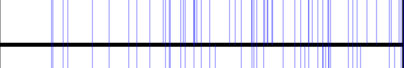
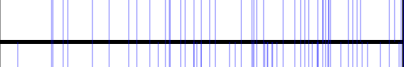
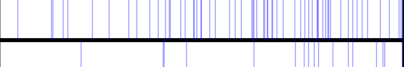



Signal Transduction R-HSA-162582



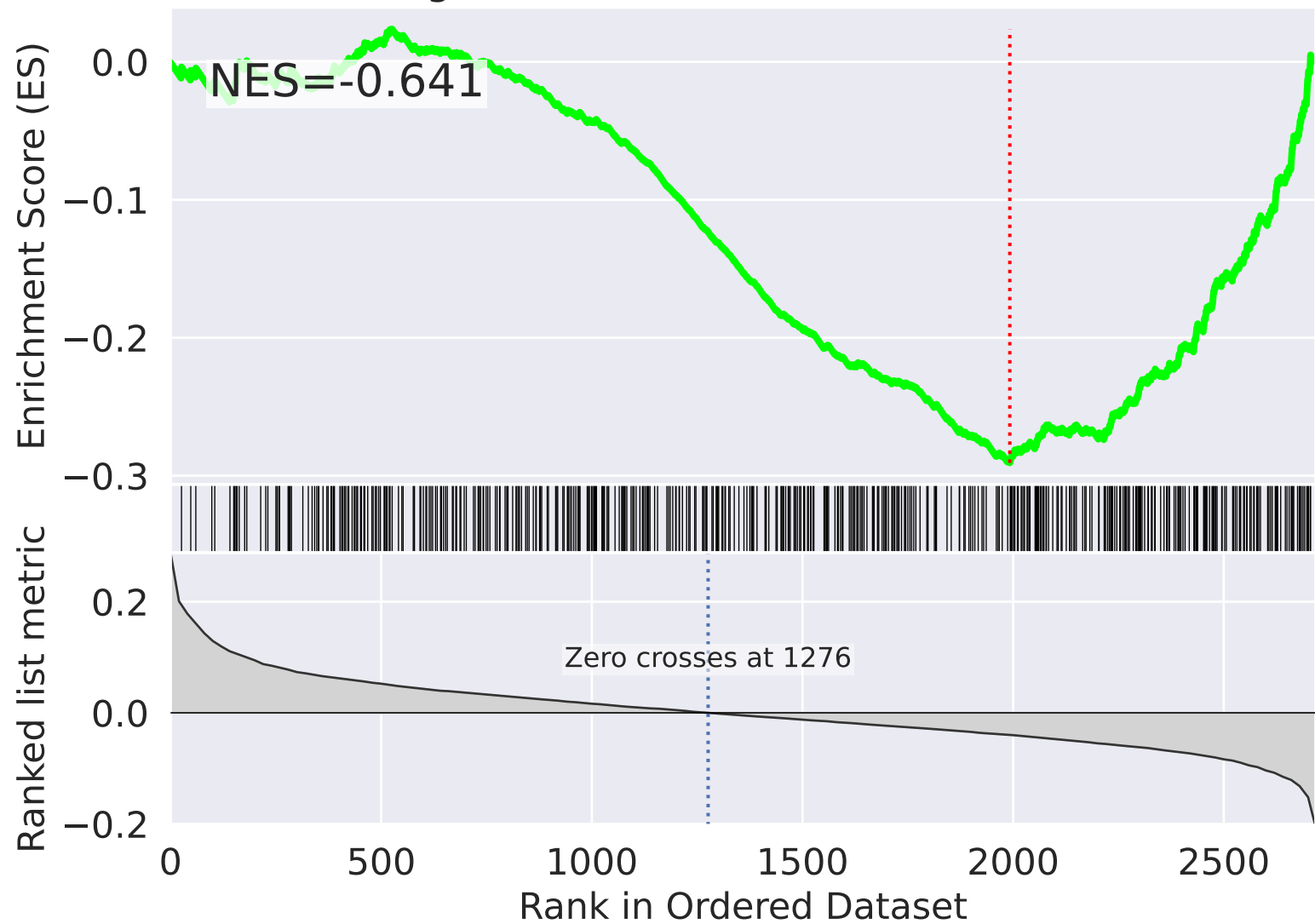
NES

SET

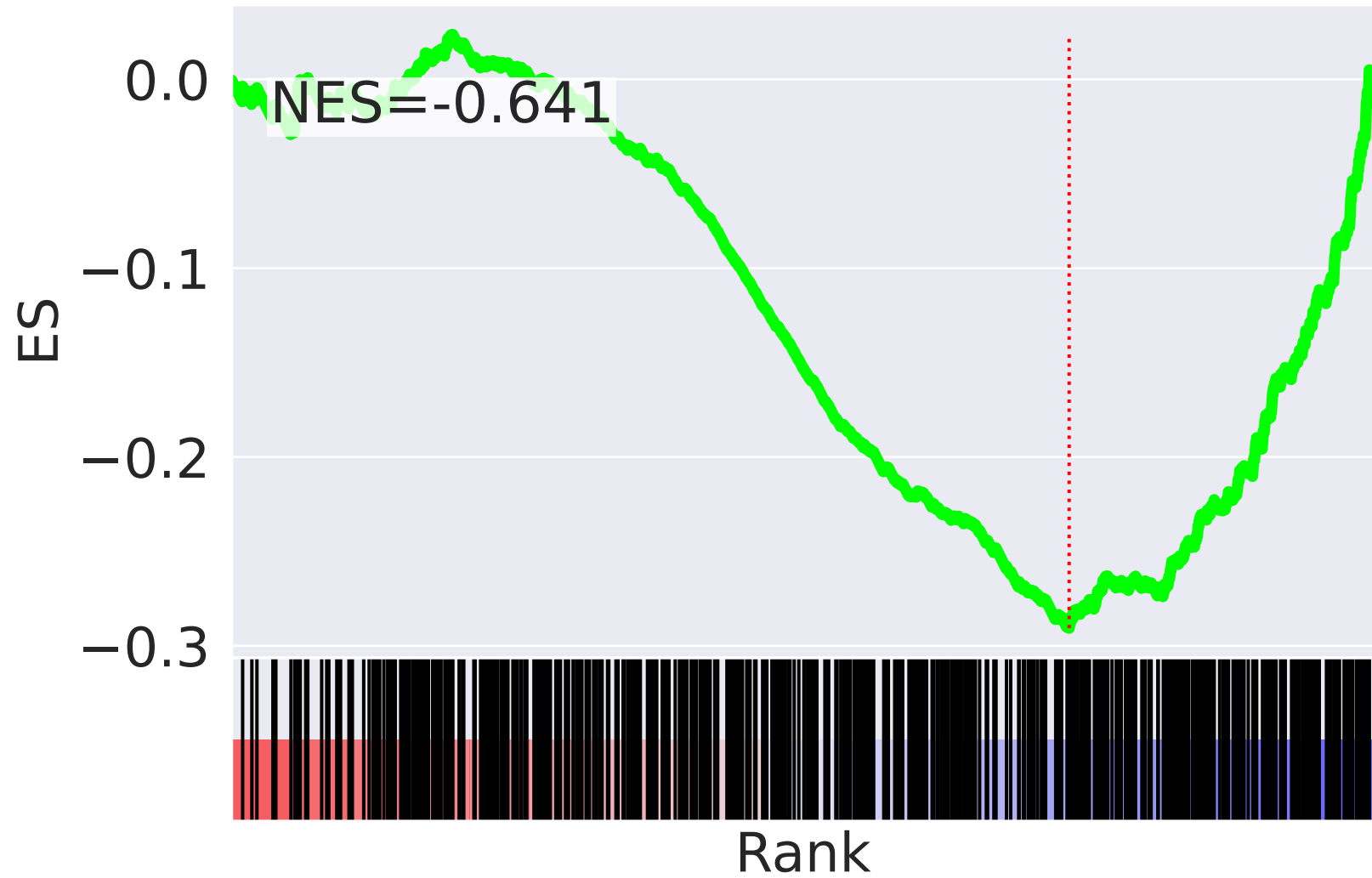
3.829		Metabolism Of Vitamins And Cofactors R-HSA-196854
3.655		Metabolism Of Water-Soluble Vitamins And Cofactors R-HSA-196849
3.267		Transcriptional Regulation Of Granulopoiesis R-HSA-9616222
-3.152		G1/S Transition R-HSA-69206
-3.044		RAF/MAP Kinase Cascade R-HSA-5673001
2.942		Metabolism Of Porphyrins R-HSA-189445
2.942		Heme Biosynthesis R-HSA-189451
2.921		Polymerase Switching On C-strand Of Telomere R-HSA-174411
2.909		Estrogen-dependent Gene Expression R-HSA-9018519
2.902		MHC Class II Antigen Presentation R-HSA-2132295
2.879		Nucleotide Biosynthesis R-HSA-8956320
-2.867		Regulation Of APC/C Activators Between G1/S And Early Anaphase R-HSA-176408
-2.867		SCF(Skp2)-mediated Degradation Of P27/P21 R-HSA-187577
-2.860		Switching Of Origins To A Post-Replicative State R-HSA-69052
-2.851		Cyclin A/B1/B2 Associated Events During G2/M Transition R-HSA-69273

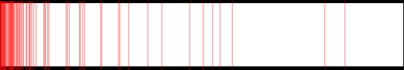


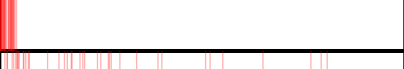
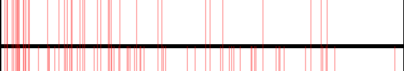
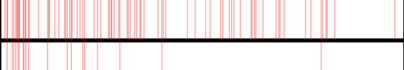
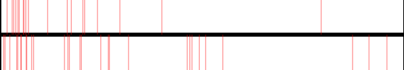
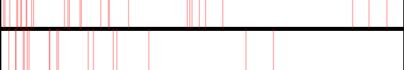
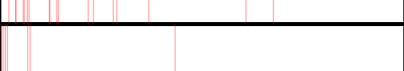
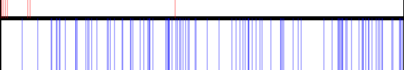
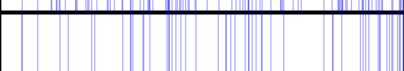


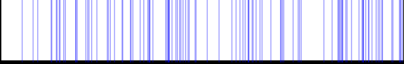

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=40$

Signal Transduction R-HSA-162582



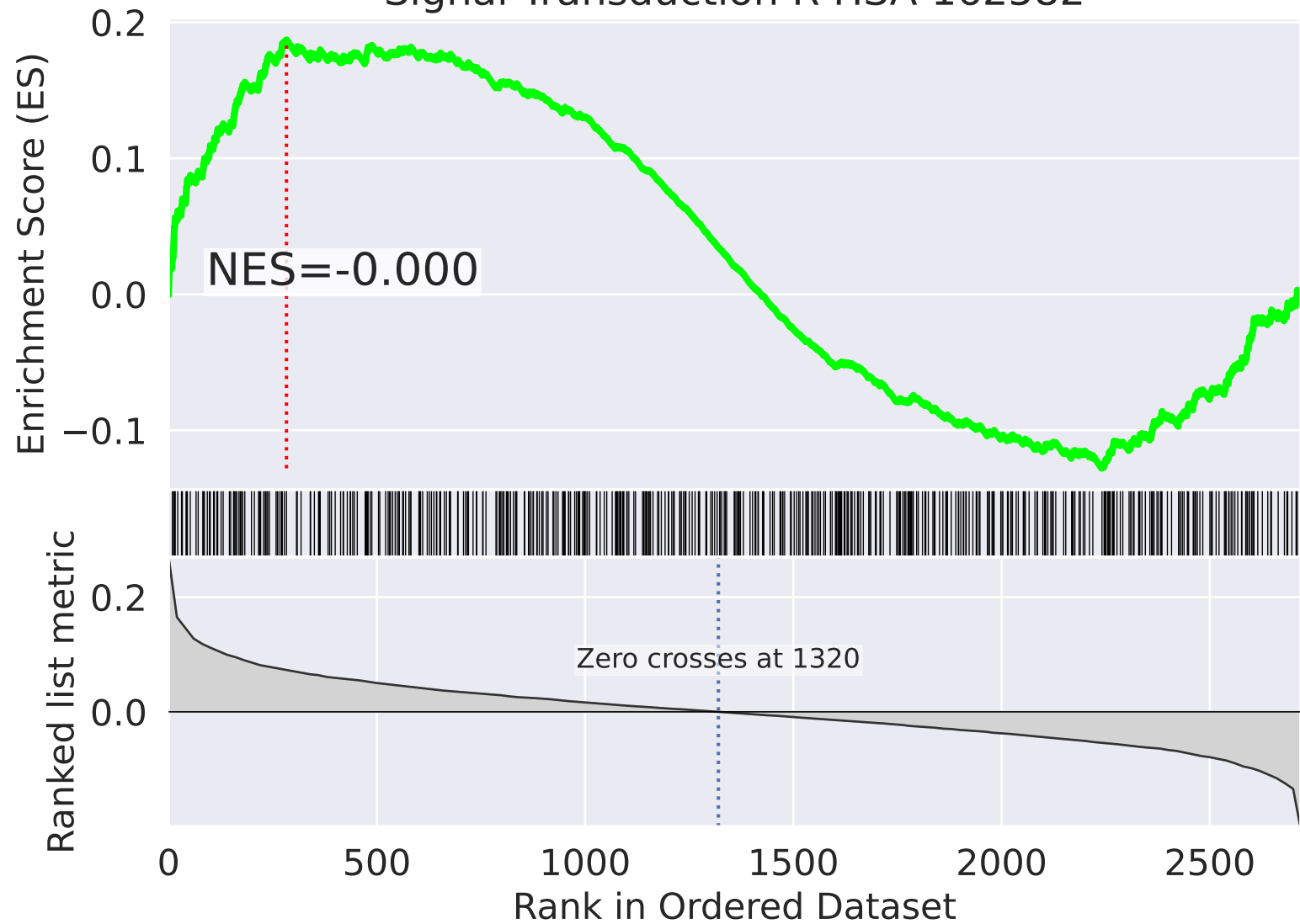
Signal Transduction R-HSA-162582



NES		SET
8.014		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
7.886		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
7.459		Respiratory Electron Transport R-HSA-611105
6.549		Complex I Biogenesis R-HSA-6799198
4.202		Mitochondrial Biogenesis R-HSA-1592230
4.000		Organelle Biogenesis And Maintenance R-HSA-1852241
3.489		Cristae Formation R-HSA-8949613
3.335		Cytoprotection By HMOX1 R-HSA-9707564
3.255		Mitochondrial tRNA Aminoacylation R-HSA-379726
3.146		rRNA Processing In Mitochondrion R-HSA-8868766
-3.111		PIP3 Activates AKT Signaling R-HSA-1257604
-3.090		Interleukin-1 Signaling R-HSA-9020702
3.015		tRNA Aminoacylation R-HSA-379724
3.009		Metabolism Of Cofactors R-HSA-8978934
-2.998		Intracellular Signaling By Second Messengers R-HSA-9006925

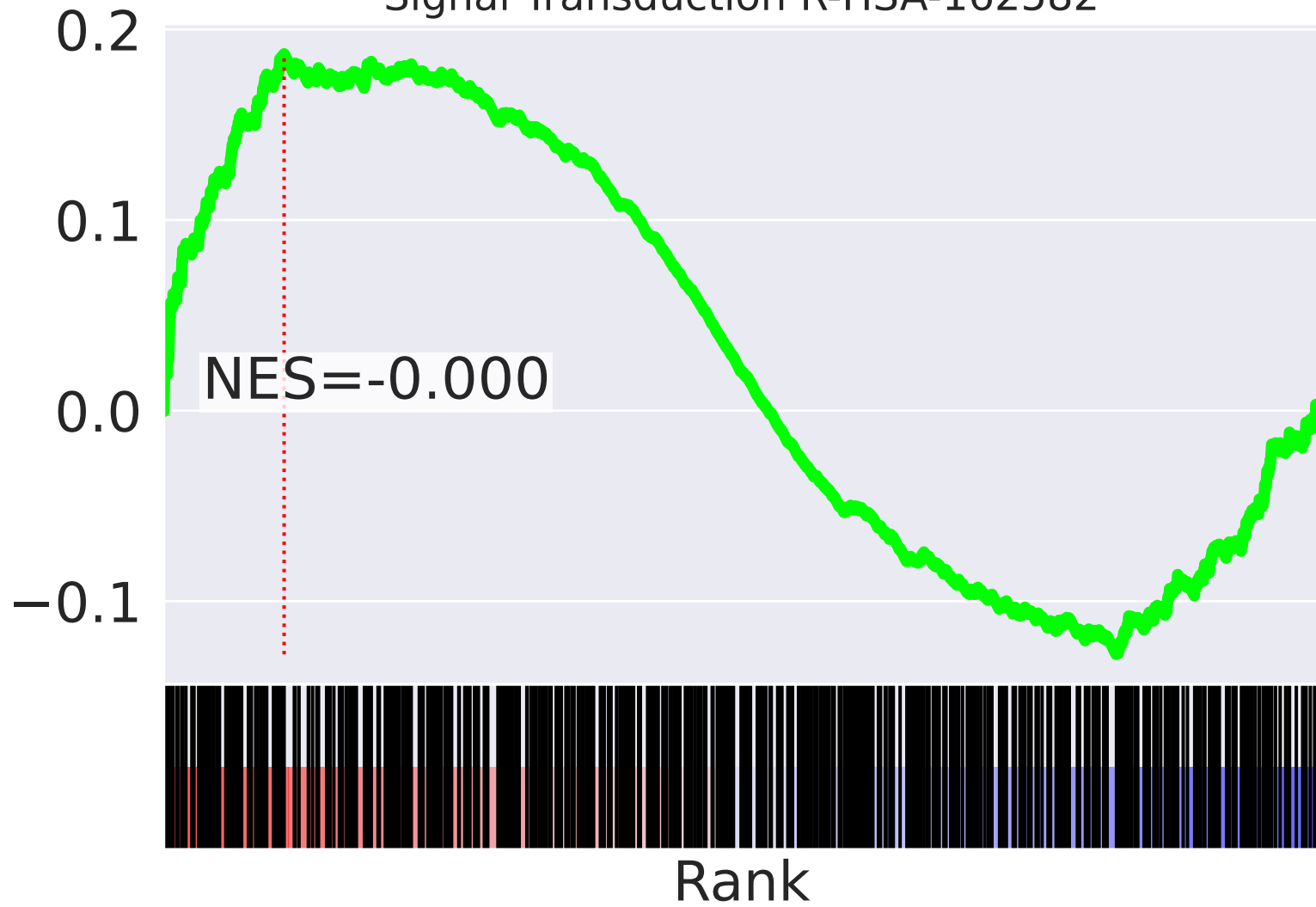
The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=41$

Signal Transduction R-HSA-162582



Signal Transduction R-HSA-162582

ES



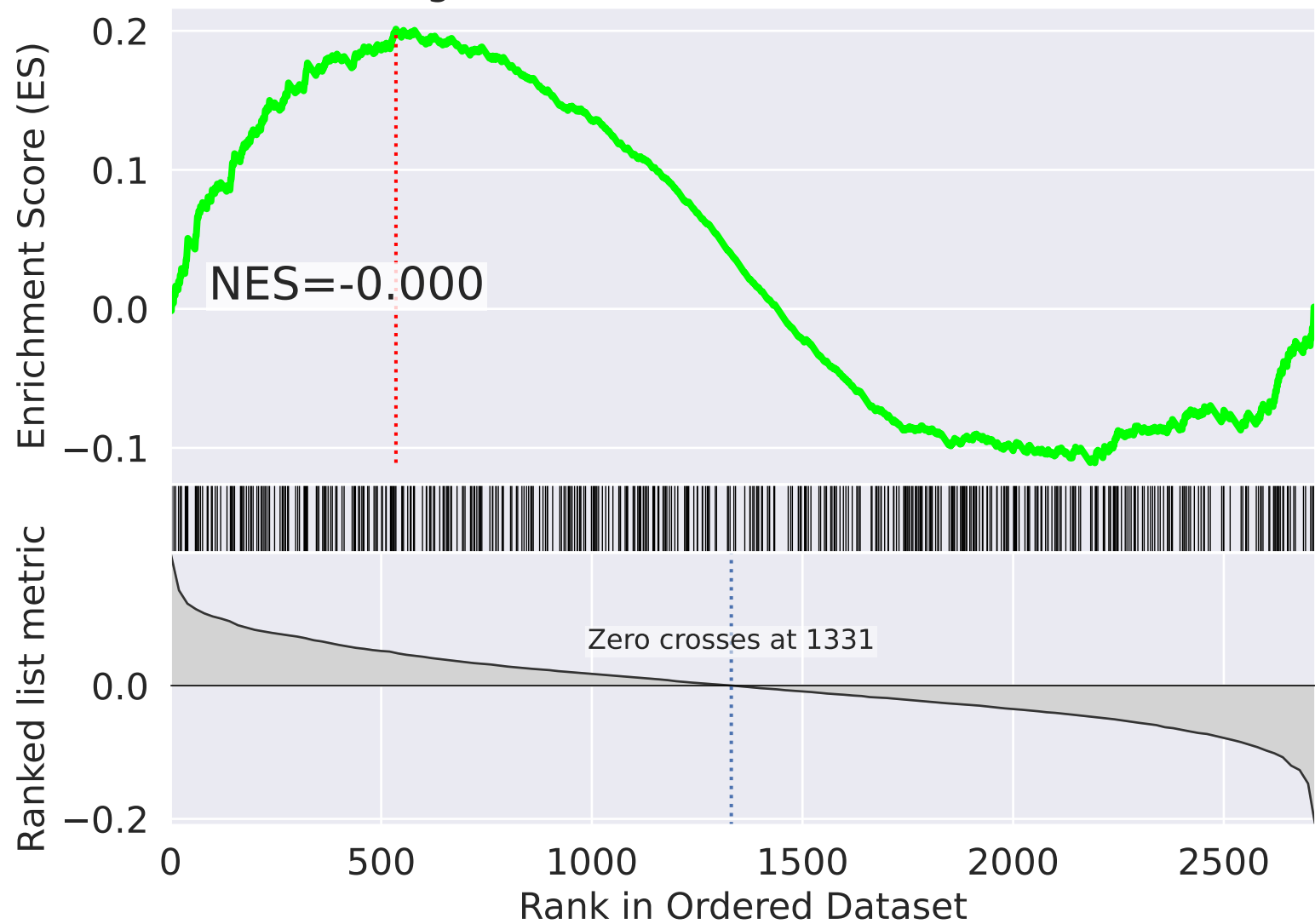
NES=-0.000

Rank

NES	SET
-3.911	APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
-3.879	Extension Of Telomeres R-HSA-180786
-3.868	G1/S Transition R-HSA-69206
-3.765	Synthesis Of DNA R-HSA-69239
-3.754	RAF/MAP Kinase Cascade R-HSA-5673001
-3.728	MAPK1/MAPK3 Signaling R-HSA-5684996
-3.717	G2/M Checkpoints R-HSA-69481
-3.709	Regulation Of APC/C Activators Between G1/S And Early Anaphase R-HSA-176408
-3.699	CDK-mediated Phosphorylation And Removal Of Cdc6 R-HSA-69017
-3.670	S Phase R-HSA-69242
-3.644	Cdc20:Phospho-APC/C Mediated Degradation Of Cyclin A R-HSA-174184
-3.644	APC:Cdc20 Mediated Degradation Of Cell Cycle Proteins Before Cycle Checkpoint Satisfied R-HSA-179419
-3.601	APC/C:Cdc20 Mediated Degradation Of Mitotic Proteins R-HSA-176409
-3.517	DNA Replication R-HSA-69306
-3.480	Neddylation R-HSA-8951664

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=42$

Signal Transduction R-HSA-162582



Signal Transduction R-HSA-162582

ES

0.2

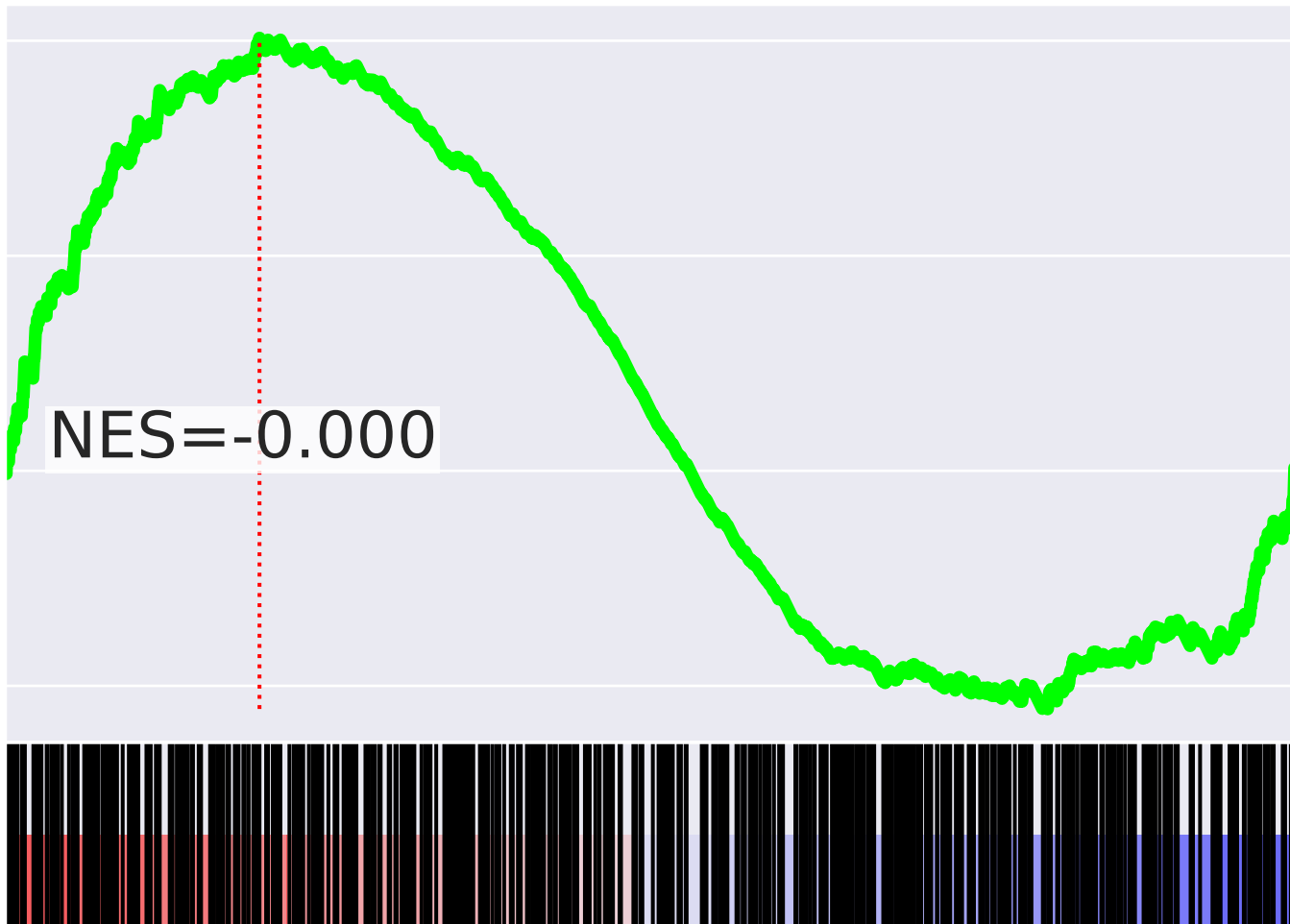
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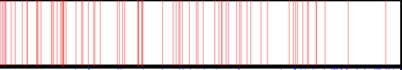
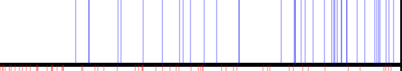
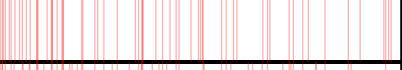
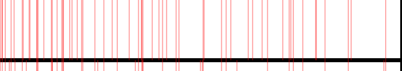
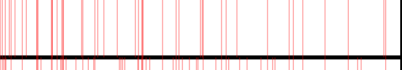
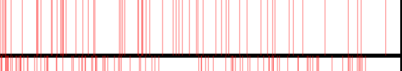
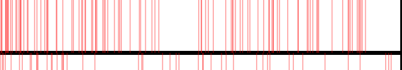
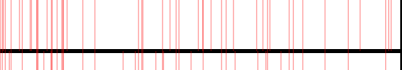
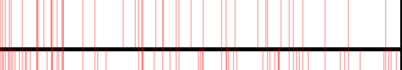
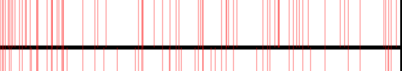
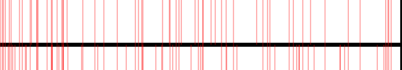
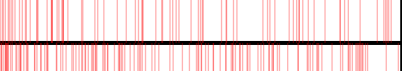
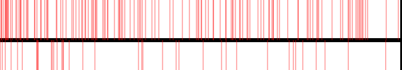

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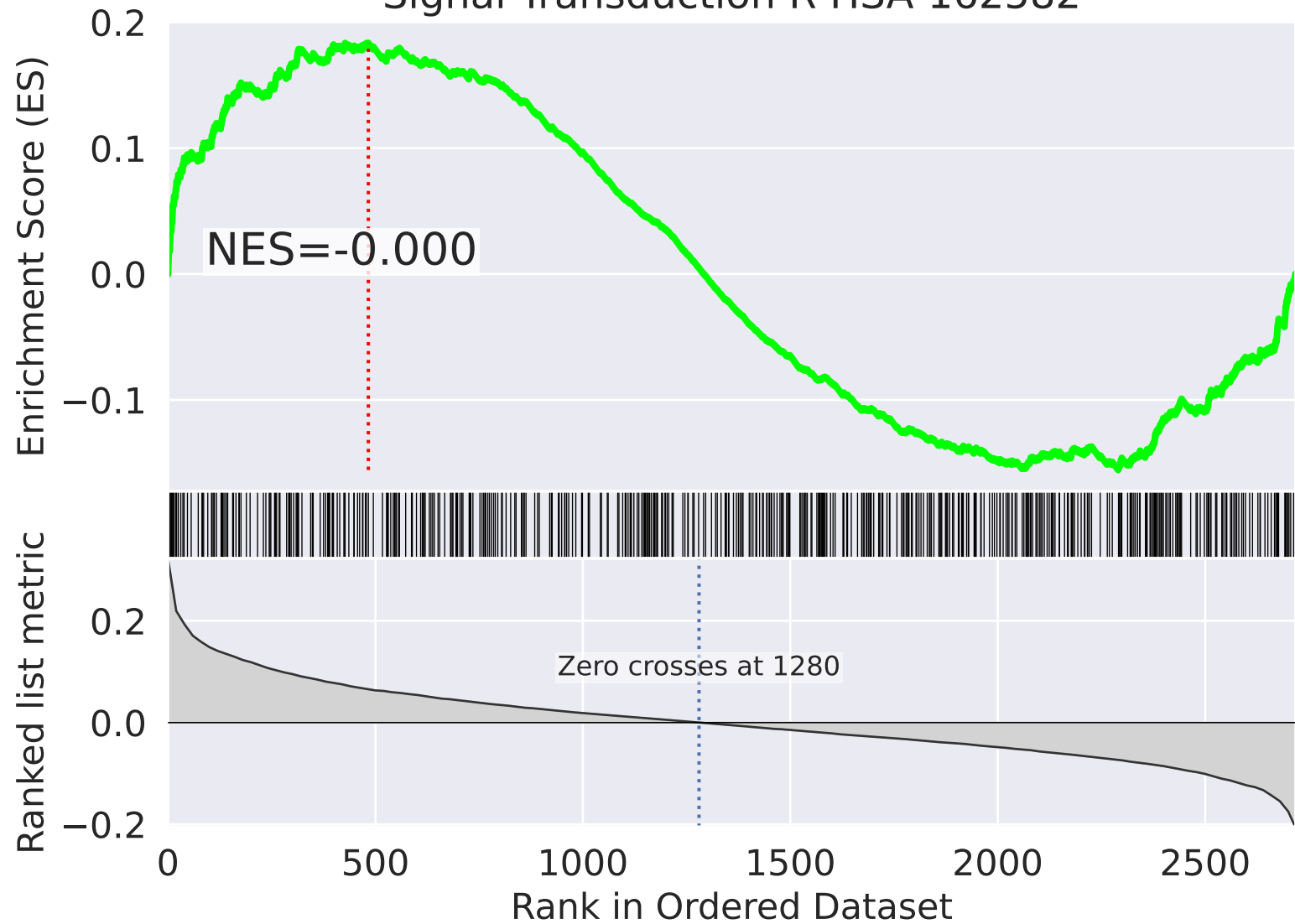
Rank



NES		SET
4.171		HIV Infection R-HSA-162906
4.102		Host Interactions Of HIV Factors R-HSA-162909
-4.027		Mitochondrial Biogenesis R-HSA-1592230
3.802		Switching Of Origins To A Post-Replicative State R-HSA-69052
3.717		Interleukin-1 Family Signaling R-HSA-446652
3.669		Orc1 Removal From Chromatin R-HSA-68949
3.635		Disorders Of Transmembrane Transporters R-HSA-5619115
3.631		mRNA Splicing - Major Pathway R-HSA-72163
3.619		APC/C:Cdh1 Mediated Degradation Of Cdc20 And APC/C:Cdh1 Targets In Late Mitosis/Early G1 R-HSA-174178
3.614		p53-Dependent G1 DNA Damage Response R-HSA-69563
3.614		DNA Replication Pre-Initiation R-HSA-69002
3.596		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
3.586		Synthesis Of DNA R-HSA-69239
3.585		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
3.542		PCP/CE Pathway R-HSA-4086400

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=43$

Signal Transduction R-HSA-162582



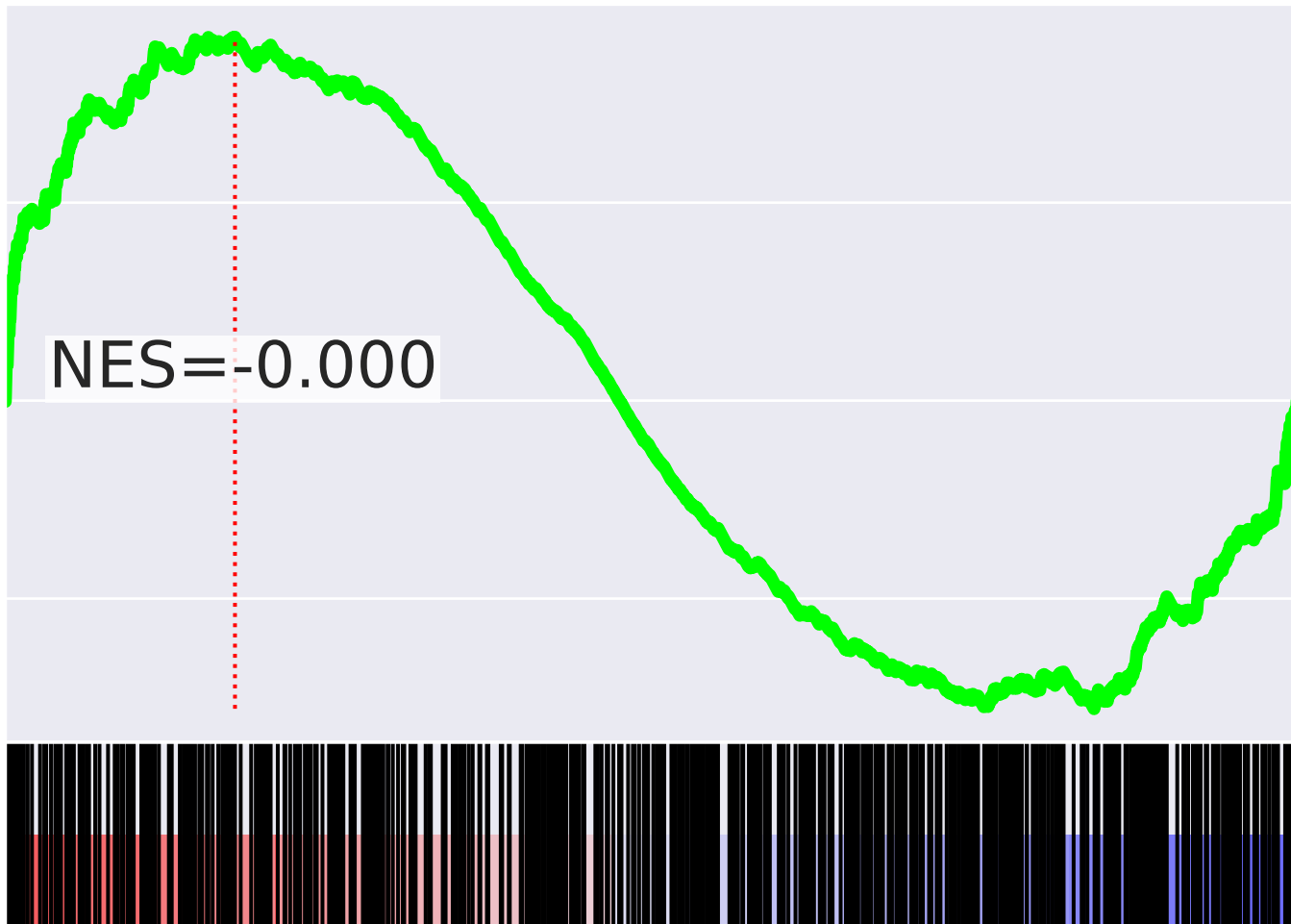
Signal Transduction R-HSA-162582

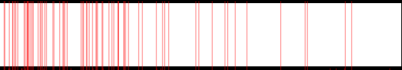
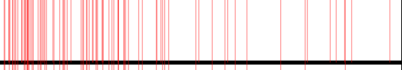
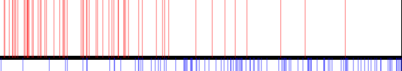
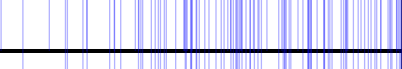
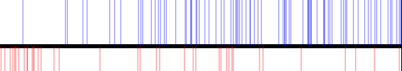
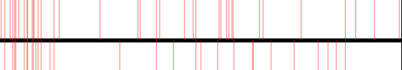
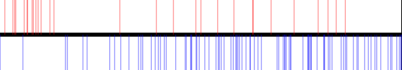
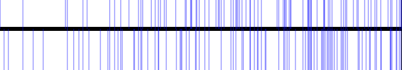
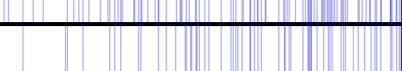
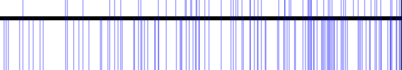
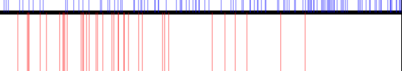




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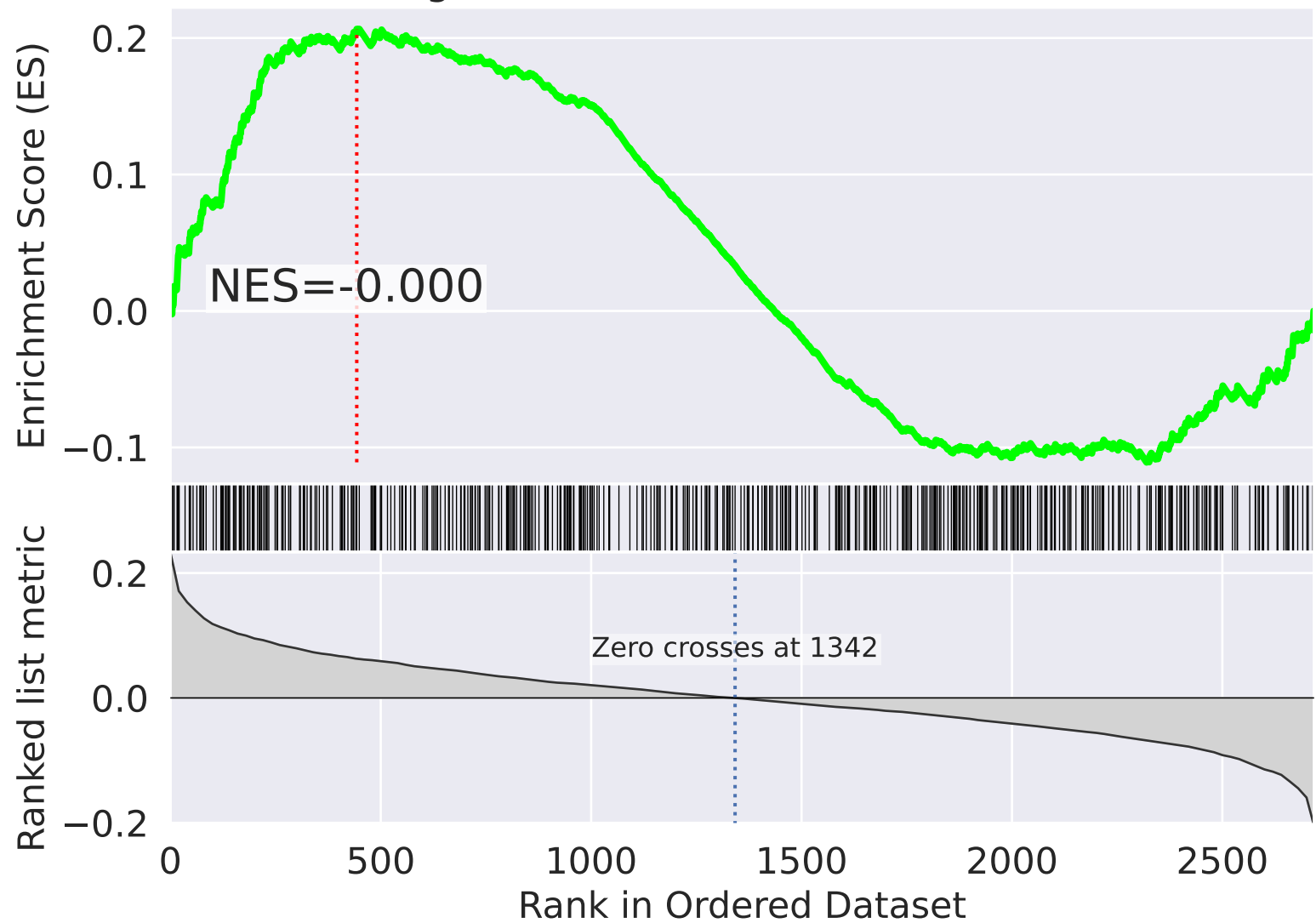
Rank



NES		SET
5.201		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
5.128		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
4.913		Respiratory Electron Transport R-HSA-611105
-4.063		S Phase R-HSA-69242
-3.985		Synthesis Of DNA R-HSA-69239
3.719		TP53 Regulates Metabolic Genes R-HSA-5628897
3.607		Cytoprotection By HMOX1 R-HSA-9707564
-3.563		DNA Replication R-HSA-69306
-3.562		Antigen Processing: Ubiquitination And Proteasome Degradation R-HSA-983168
-3.542		Switching Of Origins To A Post-Replicative State R-HSA-69052
-3.433		Class I MHC Mediated Antigen Processing And Presentation R-HSA-983169
3.413		Complex I Biogenesis R-HSA-6799198
3.400		Metabolism Of Porphyrins R-HSA-189445
3.400		Heme Biosynthesis R-HSA-189451
3.281		Metabolism Of Nucleotides R-HSA-15869

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=44$

Signal Transduction R-HSA-162582



Signal Transduction R-HSA-162582

ES

0.2

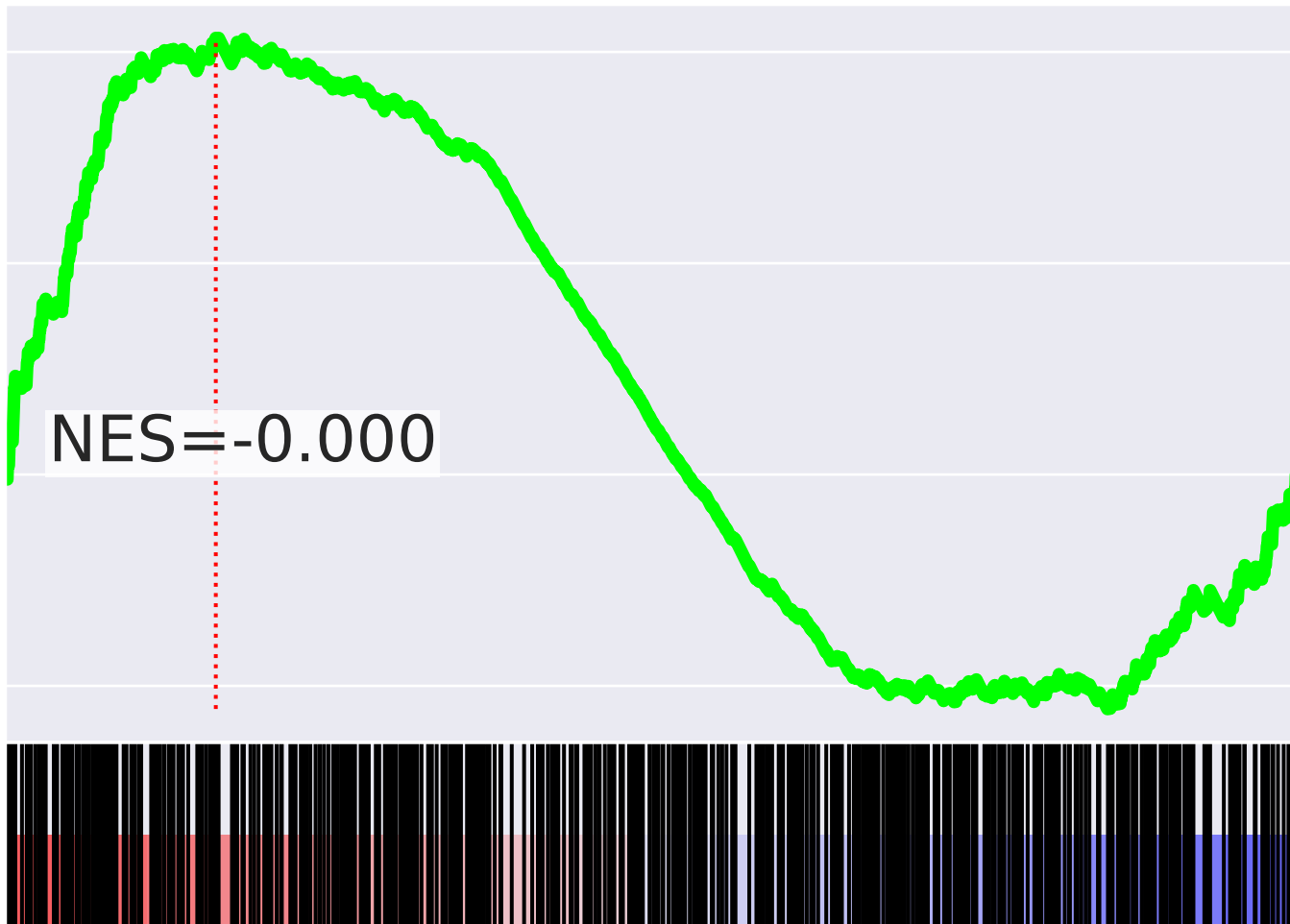
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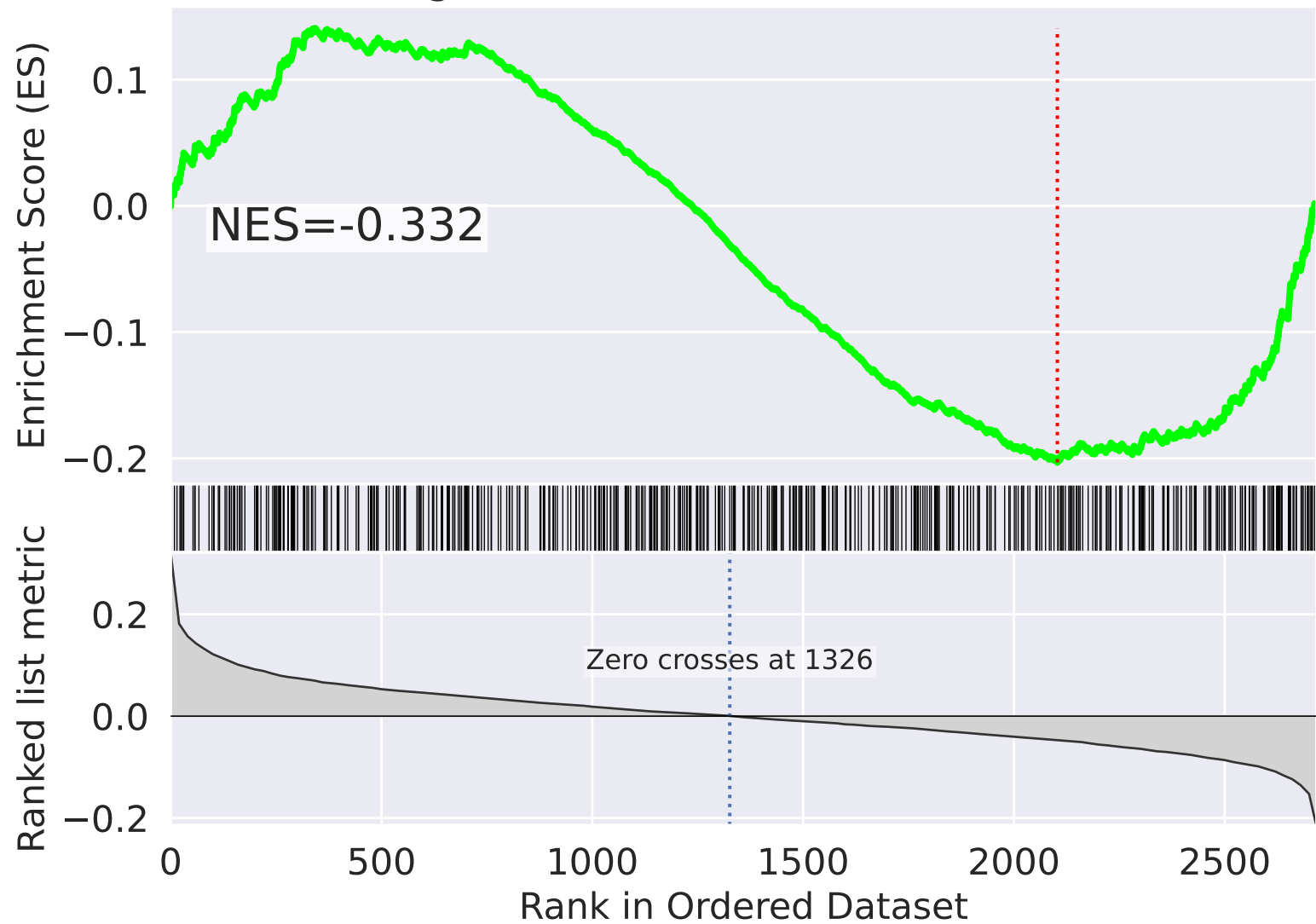
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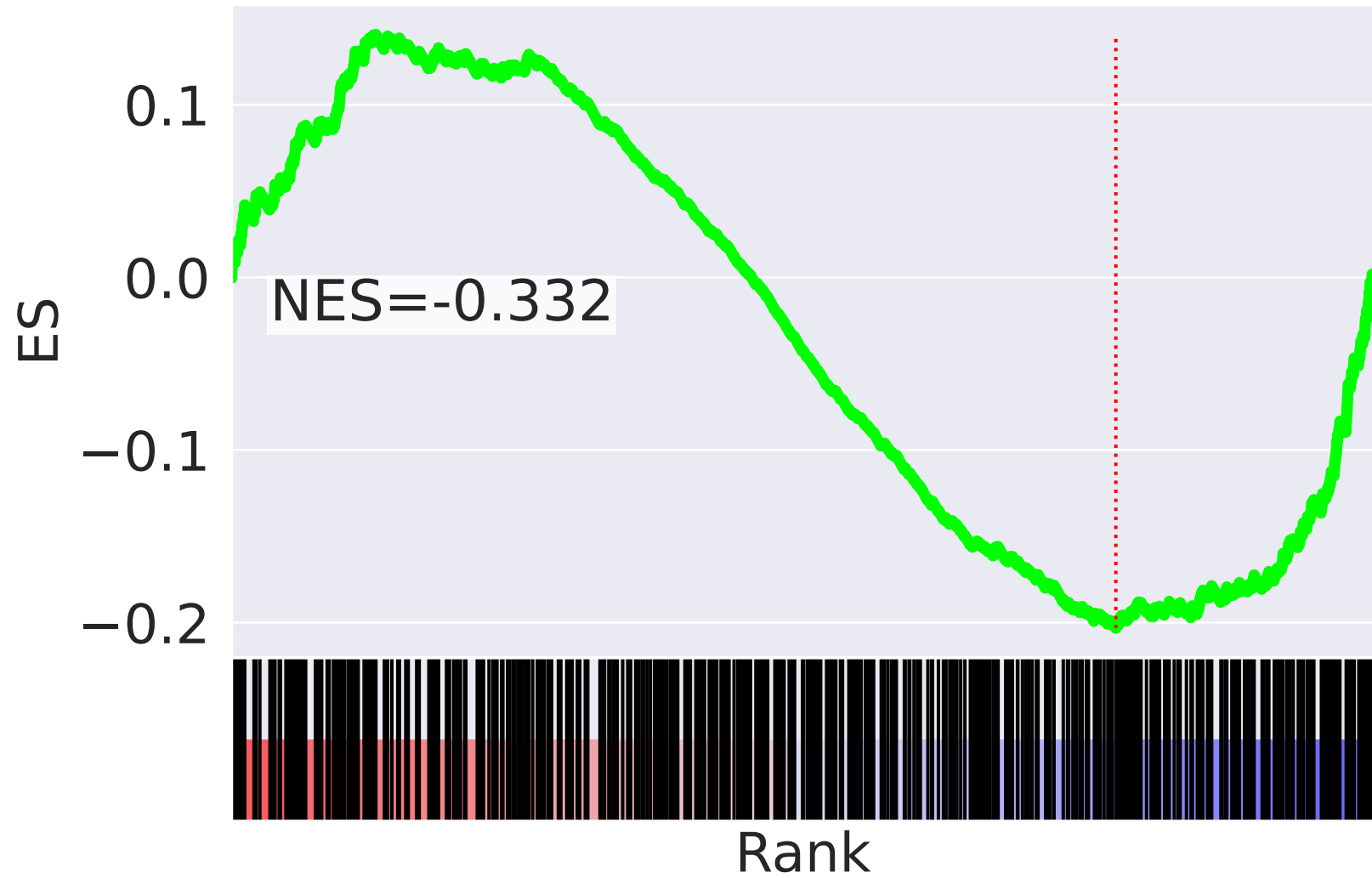
NES	SET
4.968	Adaptive Immune System R-HSA-1280218
4.325	Class I MHC Mediated Antigen Processing And Presentation R-HSA-983169
4.321	Host Interactions Of HIV Factors R-HSA-162909
4.171	DNA Replication Pre-Initiation R-HSA-69002
4.135	mRNA Splicing R-HSA-72172
4.092	Synthesis Of DNA R-HSA-69239
4.052	ER To Golgi Anterograde Transport R-HSA-199977
4.039	DNA Replication R-HSA-69306
3.987	APC/C:Cdh1 Mediated Degradation Of Cdc20 And APC/C:Cdh1 Targets In Late Mitosis/Early G1 R-HSA-174178
3.977	mRNA Splicing - Major Pathway R-HSA-72163
3.974	Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
3.967	Switching Of Origins To A Post-Replicative State R-HSA-69052
3.909	Antigen Processing: Ubiquitination And Proteasome Degradation R-HSA-983168
3.895	S Phase R-HSA-69242
3.895	Transport To Golgi And Subsequent Modification R-HSA-948021

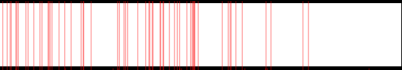
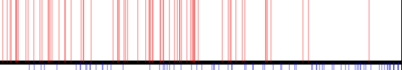
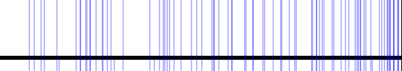
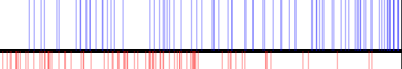
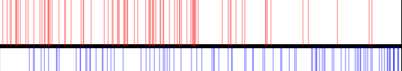
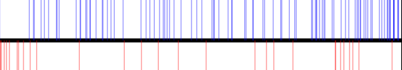
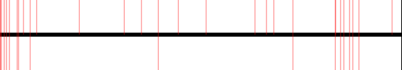
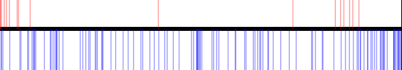
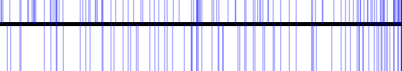
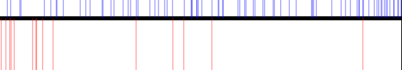
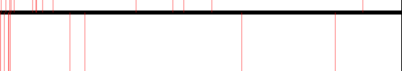




The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=45$

Signal Transduction R-HSA-162582



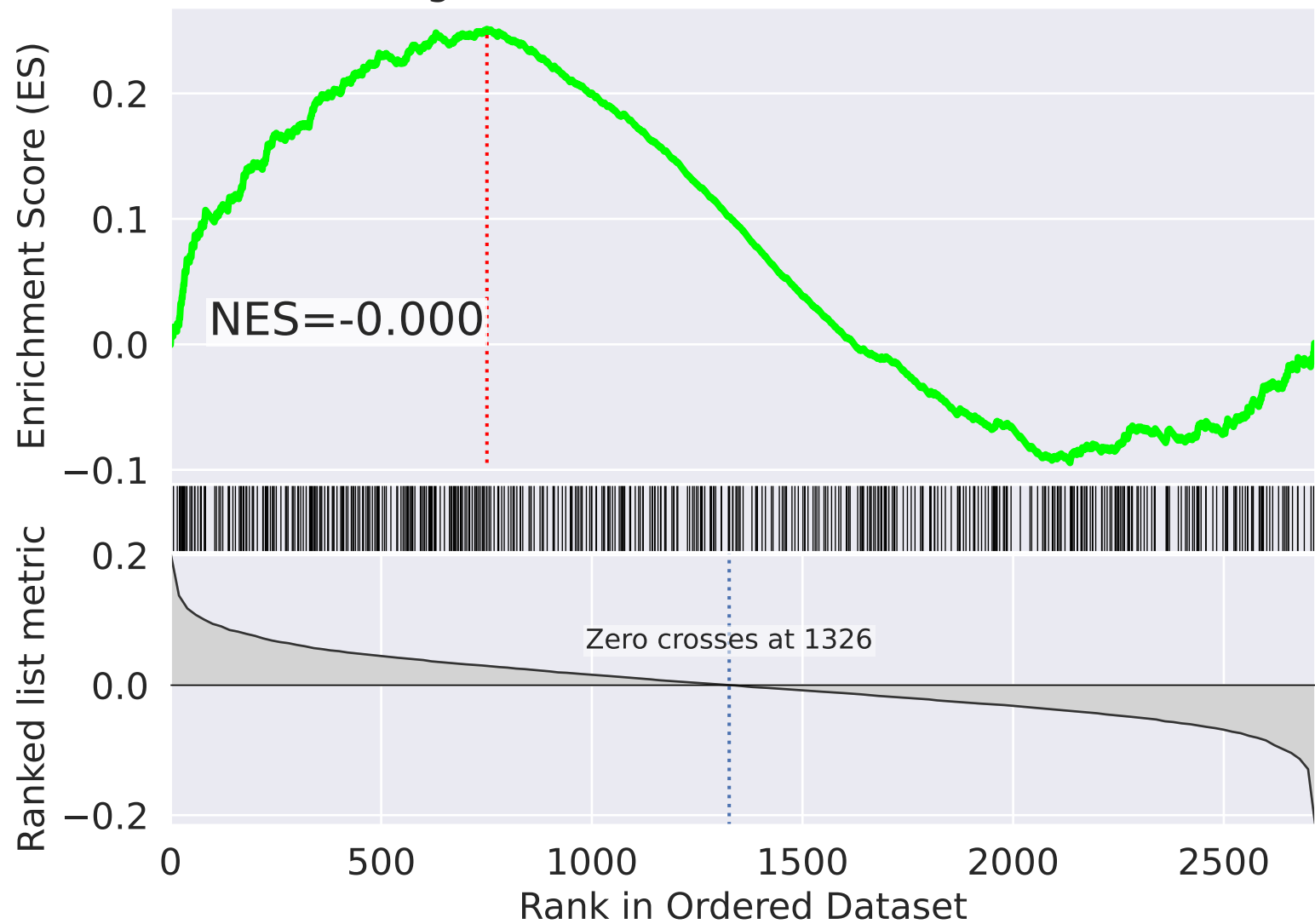
Signal Transduction R-HSA-162582



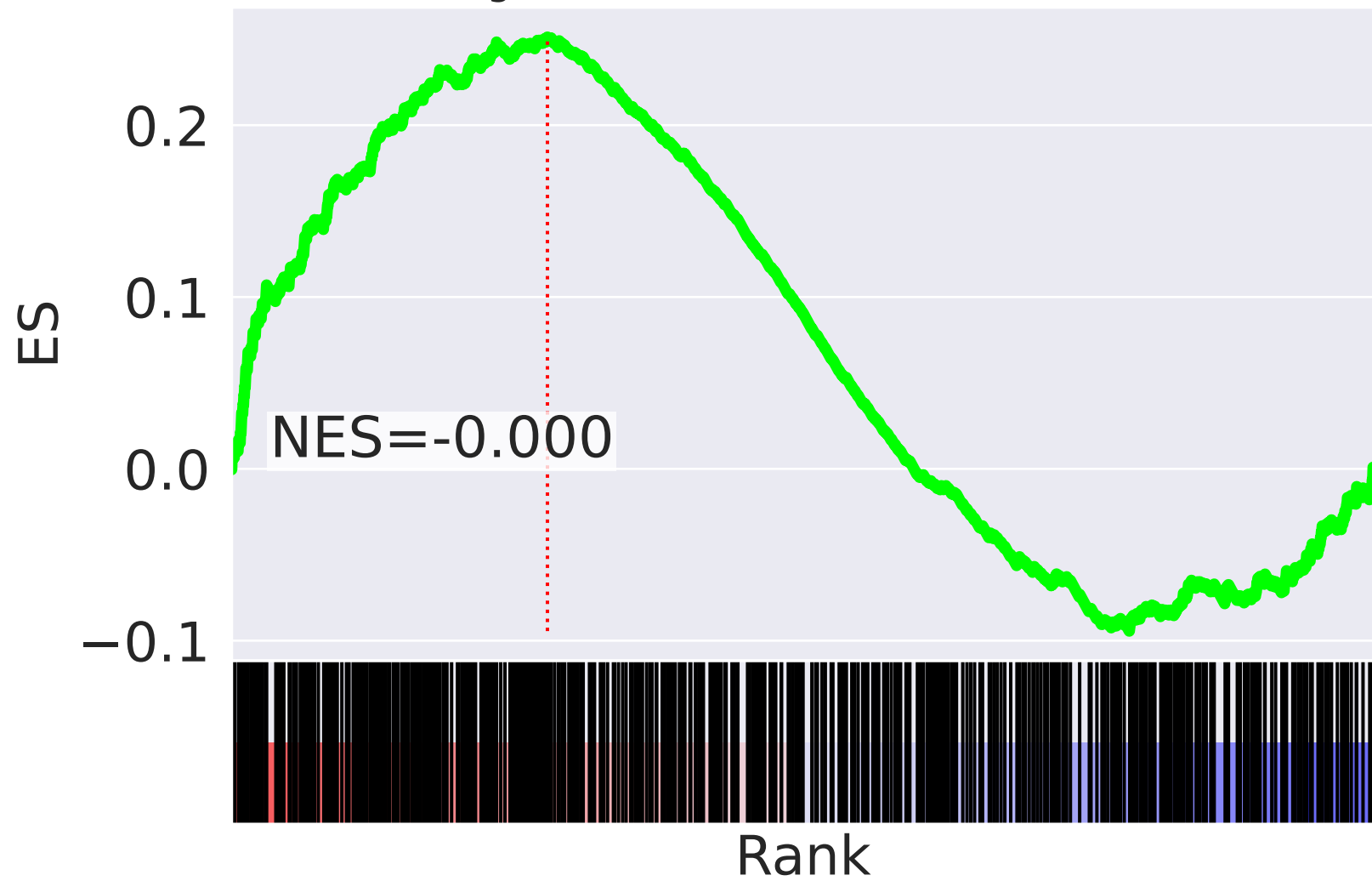
NES		SET
4.391		Respiratory Electron Transport R-HSA-611105
4.250		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
-4.129		RAF/MAP Kinase Cascade R-HSA-5673001
-4.100		MAPK1/MAPK3 Signaling R-HSA-5684996
4.080		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
-3.814		MAPK Family Signaling Cascades R-HSA-5683057
3.672		Metabolism Of Vitamins And Cofactors R-HSA-196854
3.506		Metabolism Of Water-Soluble Vitamins And Cofactors R-HSA-196849
-3.383		Signaling By Interleukins R-HSA-449147
-3.333		Programmed Cell Death R-HSA-5357801
3.310		trans-Golgi Network Vesicle Budding R-HSA-199992
3.308		Nucleotide Biosynthesis R-HSA-8956320
3.285		Golgi Associated Vesicle Biogenesis R-HSA-432722
3.206		Metabolism Of Nucleotides R-HSA-15869
3.109		Transcriptional Regulation Of Granulopoiesis R-HSA-9616222


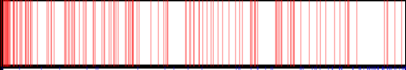

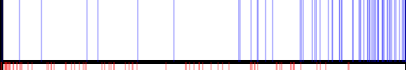
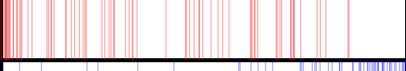
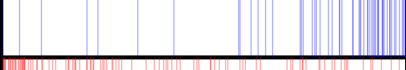
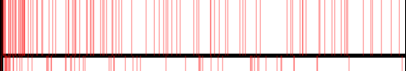
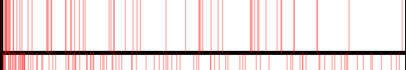
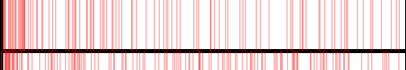
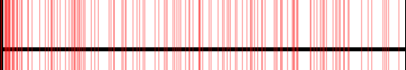
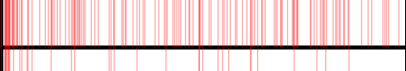
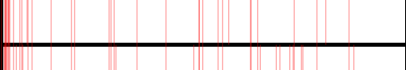
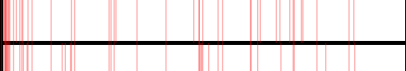
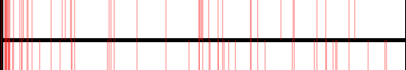
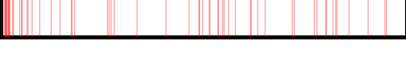
The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=46$

Signal Transduction R-HSA-162582



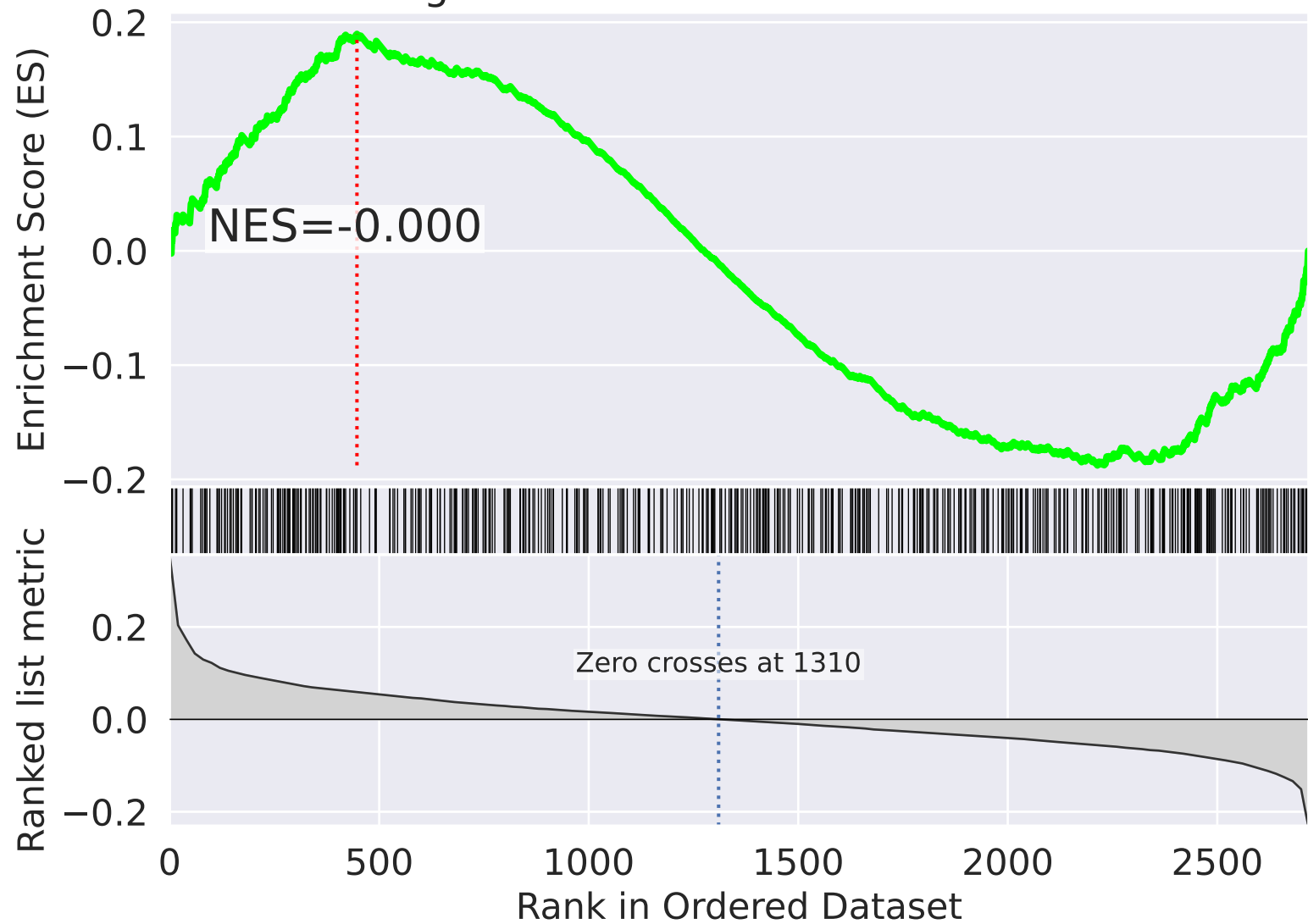
Signal Transduction R-HSA-162582



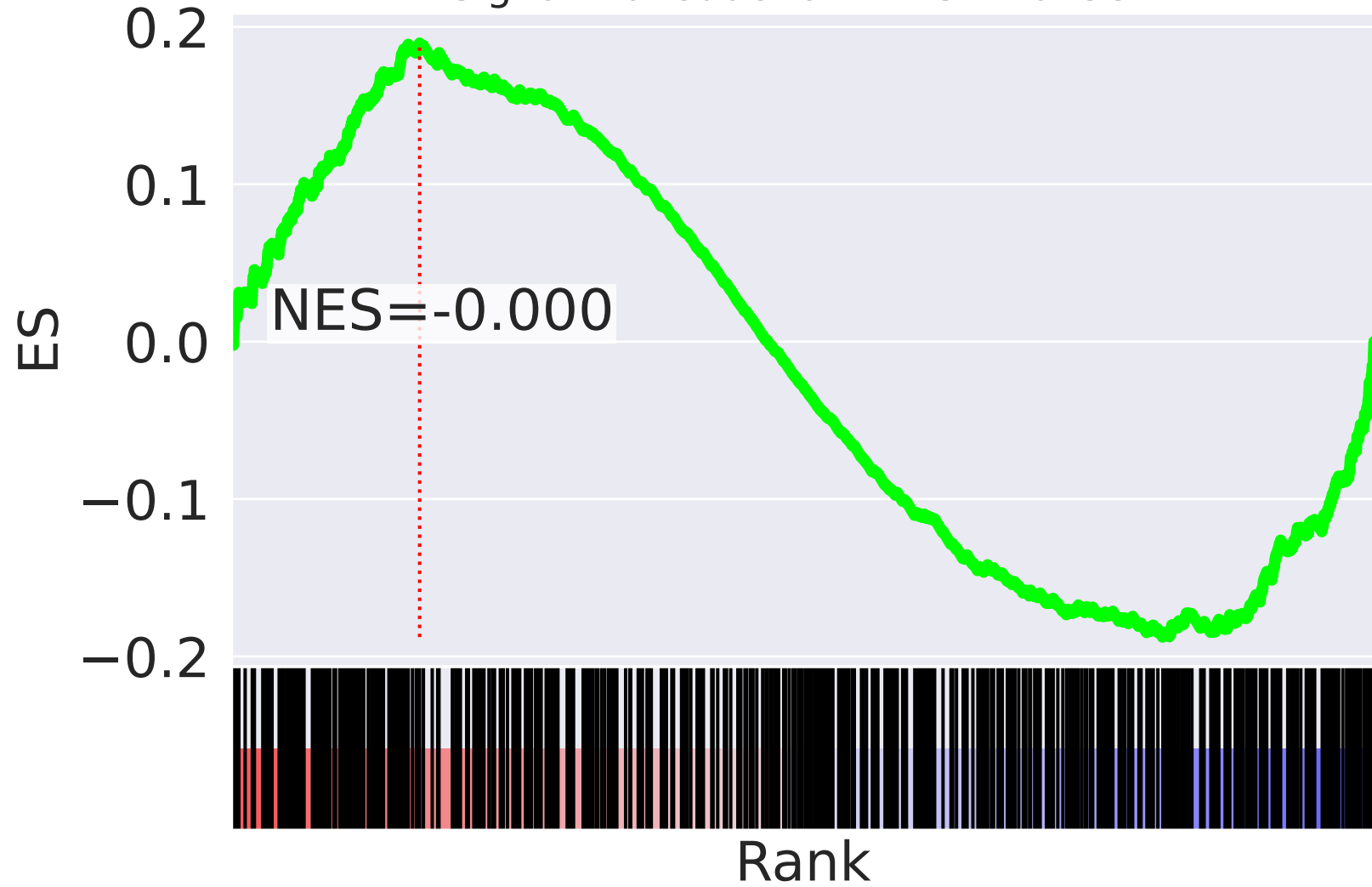
NES		SET
5.780		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
5.670		HIV Infection R-HSA-162906
-5.569		rRNA Processing R-HSA-72312
-5.496		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
5.233		Host Interactions Of HIV Factors R-HSA-162909
-5.102		Major Pathway Of rRNA Processing In Nucleolus And Cytosol R-HSA-6791226
5.102		mRNA Splicing - Major Pathway R-HSA-72163
5.088		Disorders Of Transmembrane Transporters R-HSA-5619115
4.891		mRNA Splicing R-HSA-72172
4.871		Mitotic Metaphase And Anaphase R-HSA-2555396
4.870		Mitotic Anaphase R-HSA-68882
4.855		SCF-beta-TrCP Mediated Degradation Of Emi1 R-HSA-174113
4.818		Regulation Of Expression Of SLITs And ROBOs R-HSA-9010553
4.797		Signaling By Hedgehog R-HSA-5358351
4.772		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=47$

Signal Transduction R-HSA-162582



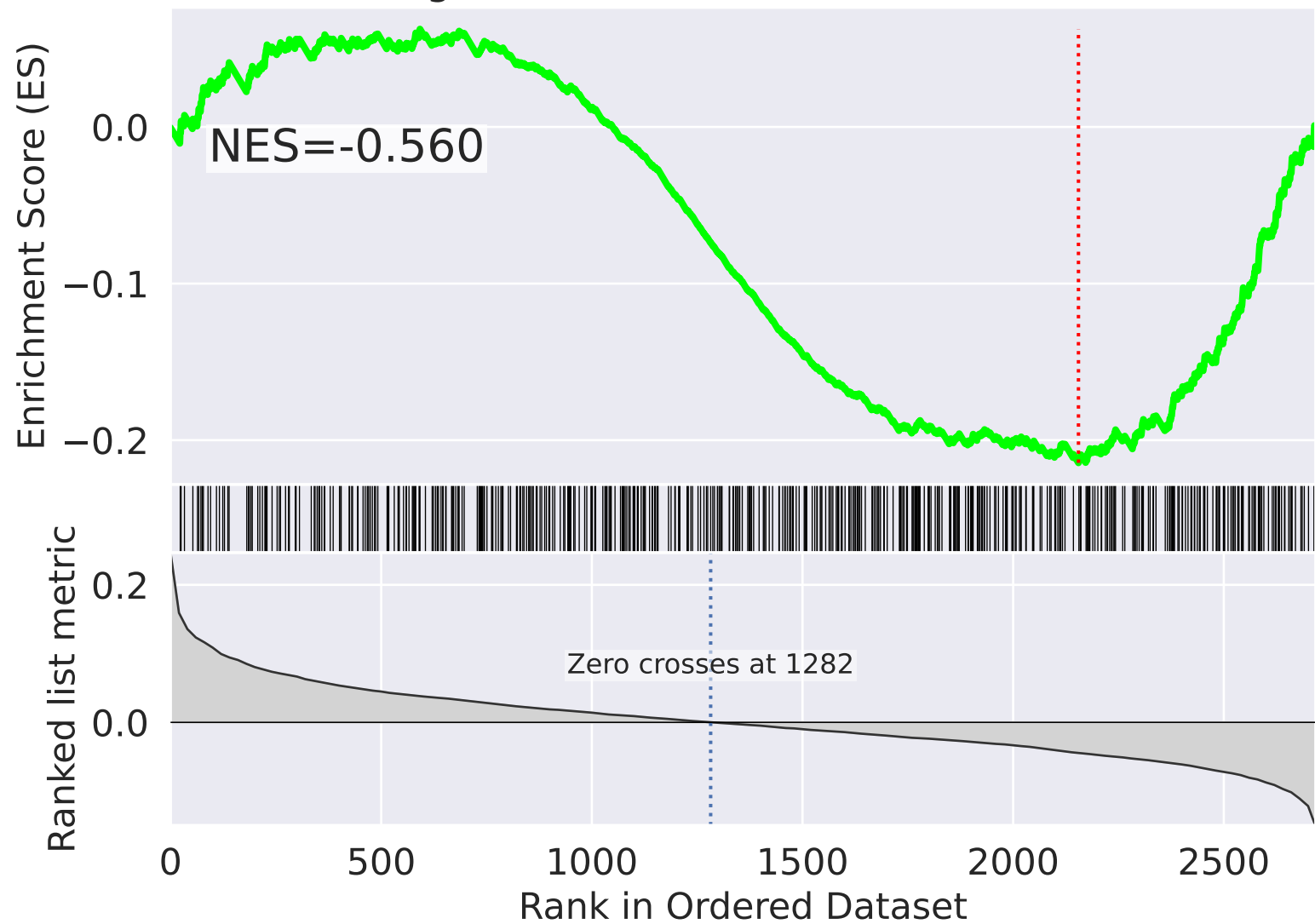
Signal Transduction R-HSA-162582



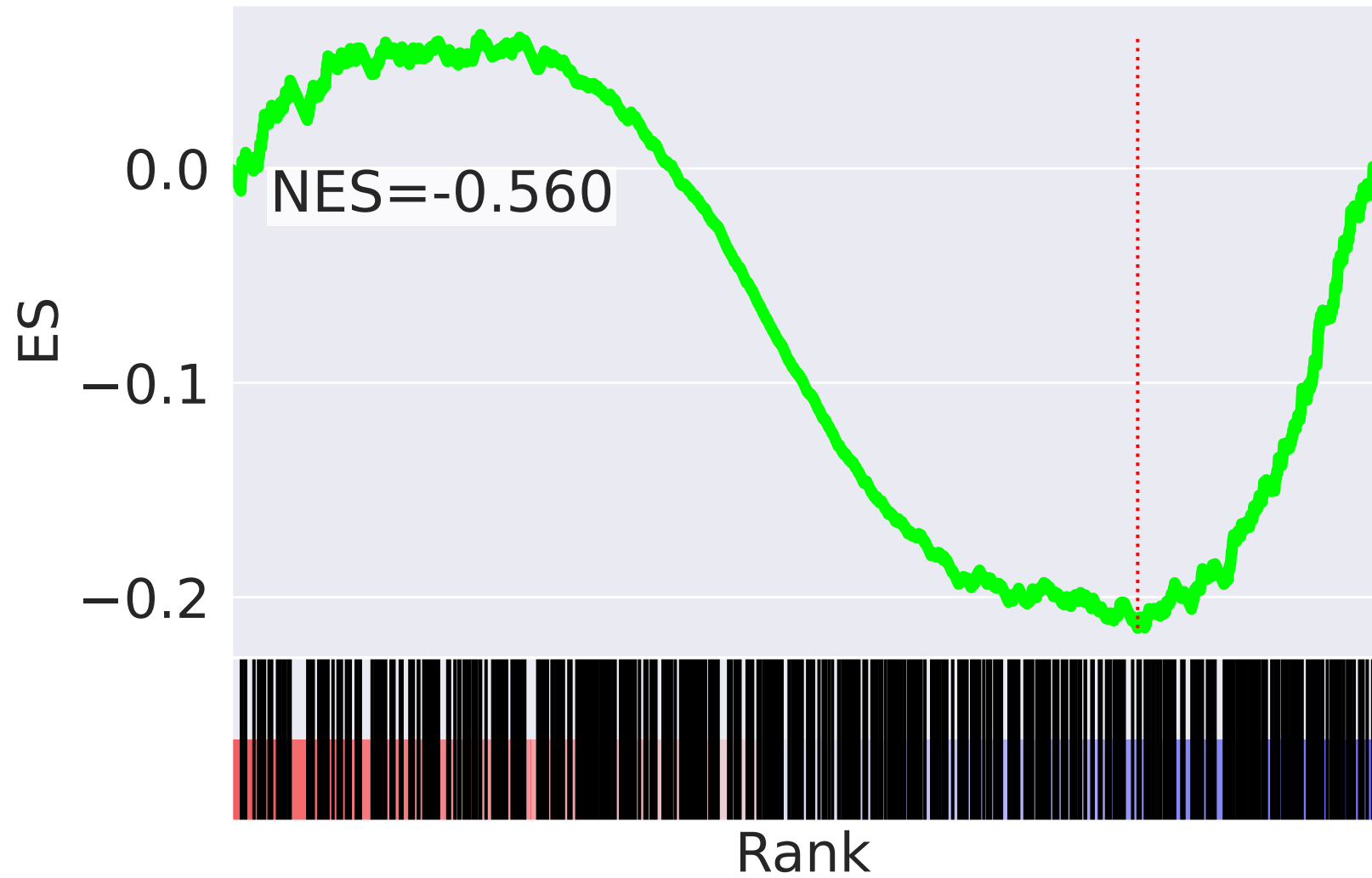
NES		SET
4.055		Metabolism Of Nucleotides R-HSA-15869
-3.784		Mitotic G2-G2/M Phases R-HSA-453274
-3.556		G2/M Transition R-HSA-69275
3.479		Metabolism Of Vitamins And Cofactors R-HSA-196854
3.426		Heme Biosynthesis R-HSA-189451
3.426		Metabolism Of Porphyrins R-HSA-189445
3.426		Nucleotide Biosynthesis R-HSA-8956320
3.353		TP53 Regulates Metabolic Genes R-HSA-5628897
3.342		Formation Of RNA Pol II Elongation Complex R-HSA-112382
-3.167		Antigen Processing: Ubiquitination And Proteasome Degradation R-HSA-983168
-3.120		Regulation Of Actin Dynamics For Phagocytic Cup Formation R-HSA-2029482
3.110		MTOR Signaling R-HSA-165159
3.105		Purine Ribonucleoside Monophosphate Biosynthesis R-HSA-73817
3.102		Chromatin Modifying Enzymes R-HSA-3247509
-3.088		Hedgehog On State R-HSA-5632684

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=48$

Signal Transduction R-HSA-162582


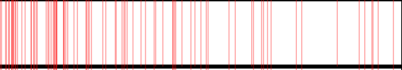
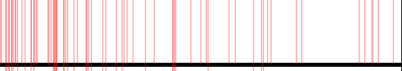
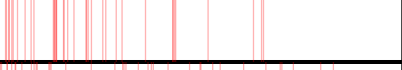
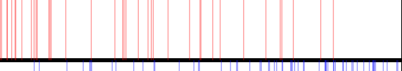
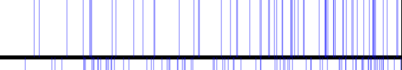
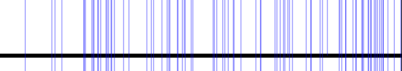
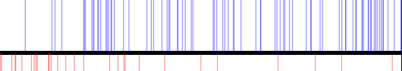
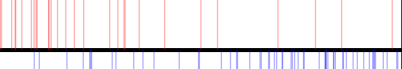
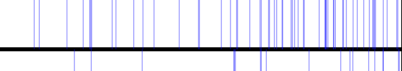
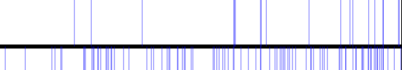
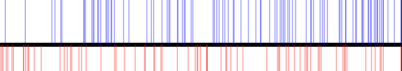
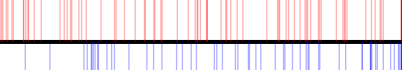
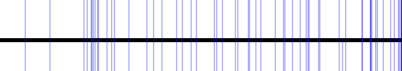



Signal Transduction R-HSA-162582



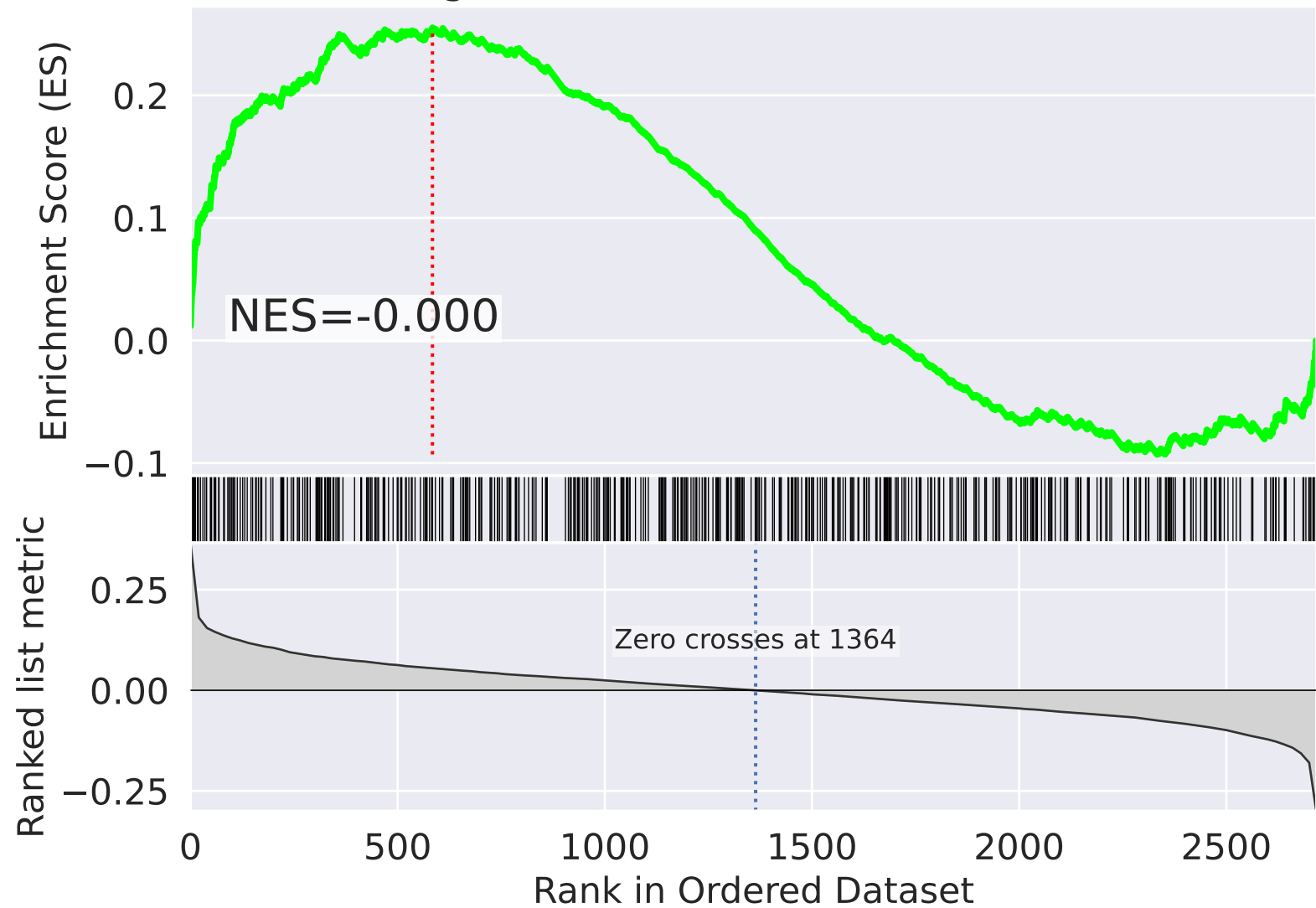
NES

SET

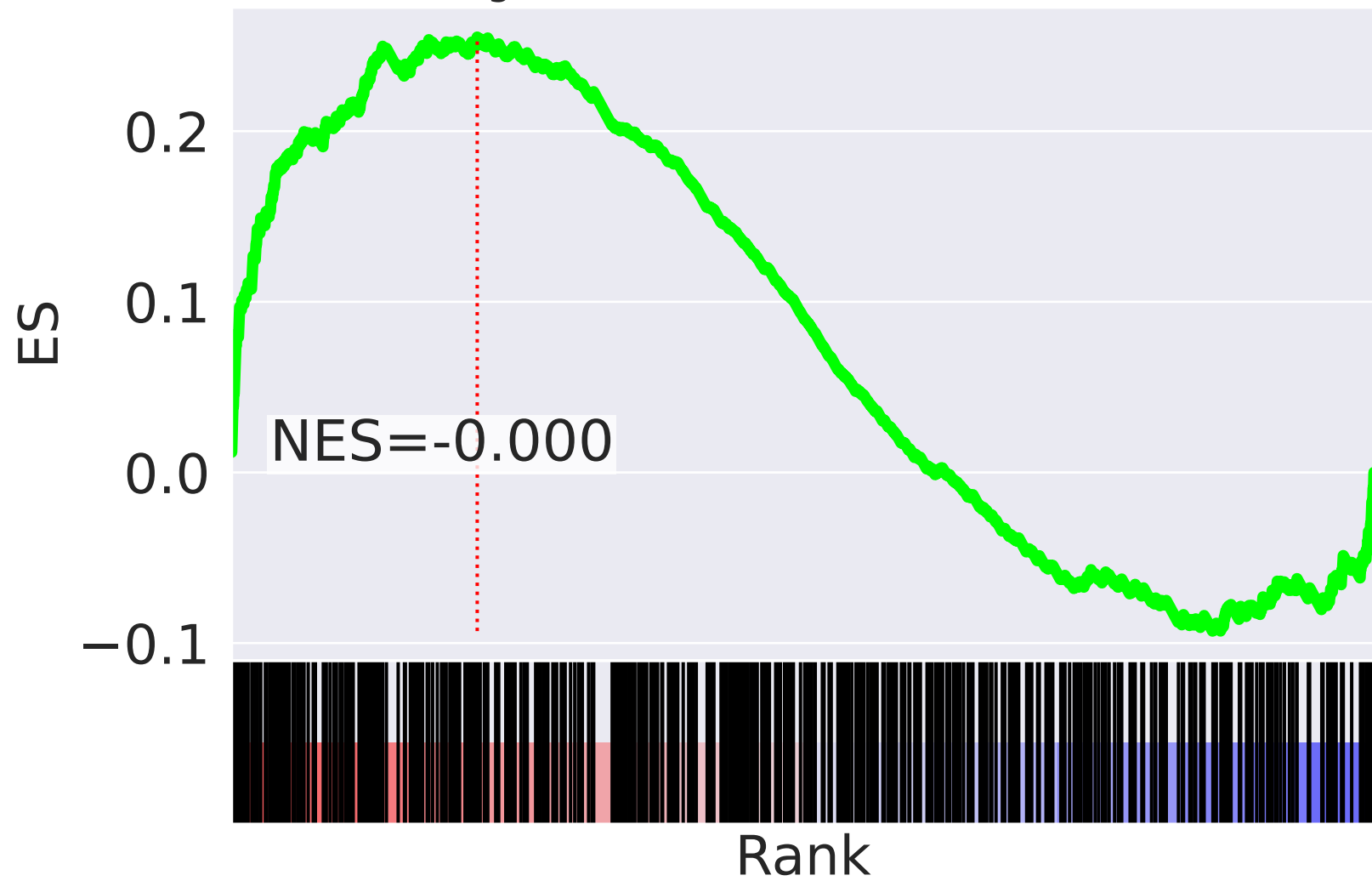
5.456		Respiratory Electron Transport R-HSA-611105
5.041		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
4.700		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
4.336		Complex I Biogenesis R-HSA-6799198
3.994		TP53 Regulates Metabolic Genes R-HSA-5628897
-3.506		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
-3.412		MAPK1/MAPK3 Signaling R-HSA-5684996
-3.406		RAF/MAP Kinase Cascade R-HSA-5673001
3.255		Cytoprotection By HMOX1 R-HSA-9707564
-3.179		Major Pathway Of rRNA Processing In Nucleolus And Cytosol R-HSA-6791226
-3.076		Signaling By Non-Receptor Tyrosine Kinases R-HSA-9006927
-3.042		MAPK Family Signaling Cascades R-HSA-5683057
3.005		Translation R-HSA-72766
-2.983		Cyclin E Associated Events During G1/S Transition R-HSA-69202
-2.965		Cyclin A:Cdk2-associated Events At S Phase Entry R-HSA-69656

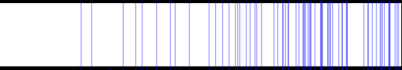
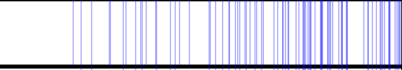
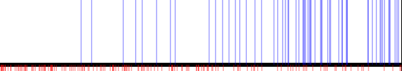
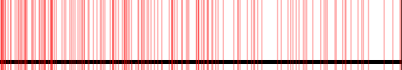
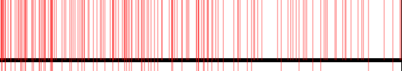
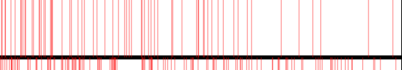
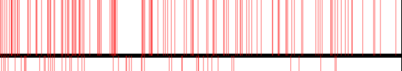
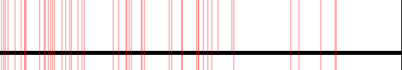
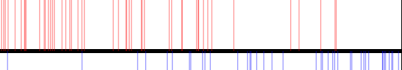
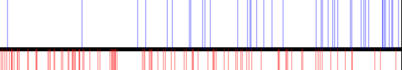
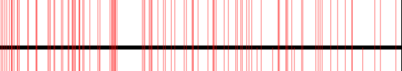
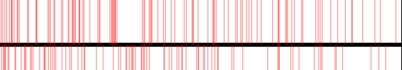
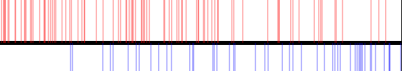
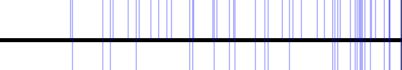

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=49$

Signal Transduction R-HSA-162582



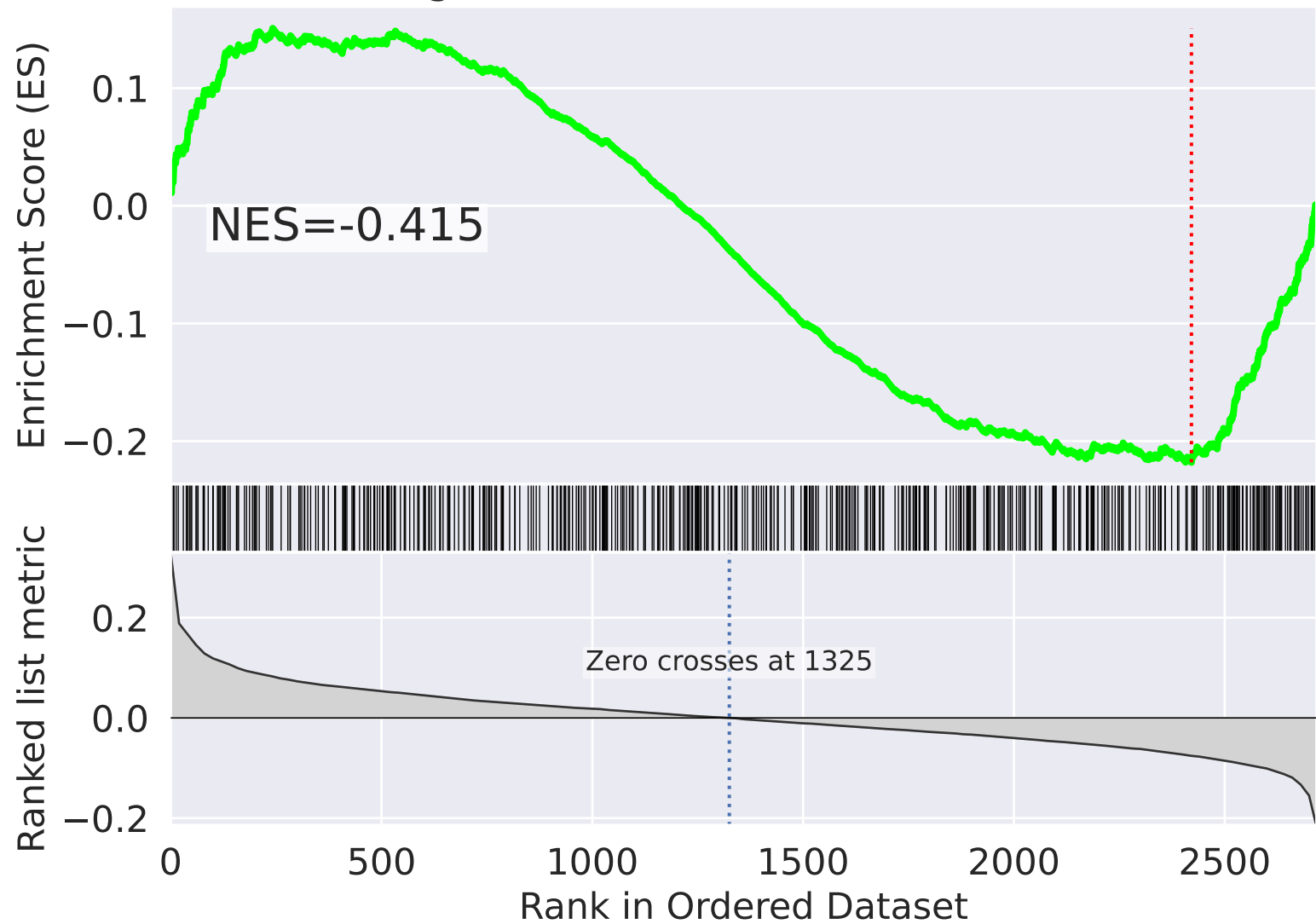
Signal Transduction R-HSA-162582



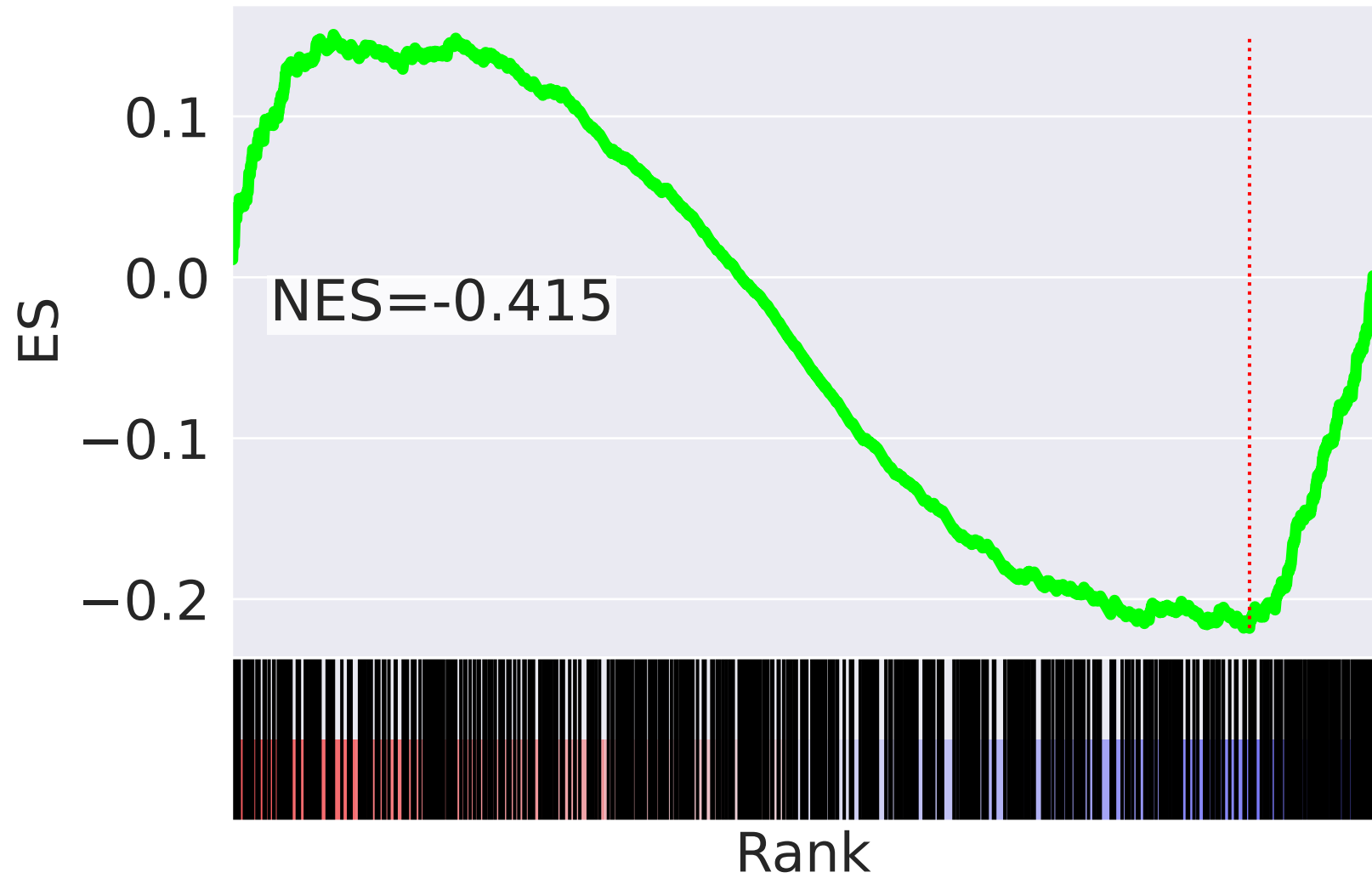
NES		SET
-5.545		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
-5.293		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
-4.953		Respiratory Electron Transport R-HSA-611105
4.758		Membrane Trafficking R-HSA-199991
4.736		Vesicle-mediated Transport R-HSA-5653656
4.406		Intra-Golgi And Retrograde Golgi-to-ER Traffic R-HSA-6811442
4.163		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
4.115		Transport To Golgi And Subsequent Modification R-HSA-948021
4.105		ER To Golgi Anterograde Transport R-HSA-199977
-4.026		Mitochondrial Biogenesis R-HSA-1592230
4.003		mRNA Splicing - Major Pathway R-HSA-72163
3.869		mRNA Splicing R-HSA-72172
3.858		Asparagine N-linked Glycosylation R-HSA-446203
-3.840		Protein Localization R-HSA-9609507
-3.777		Mitochondrial Protein Import R-HSA-1268020

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=50$

Signal Transduction R-HSA-162582



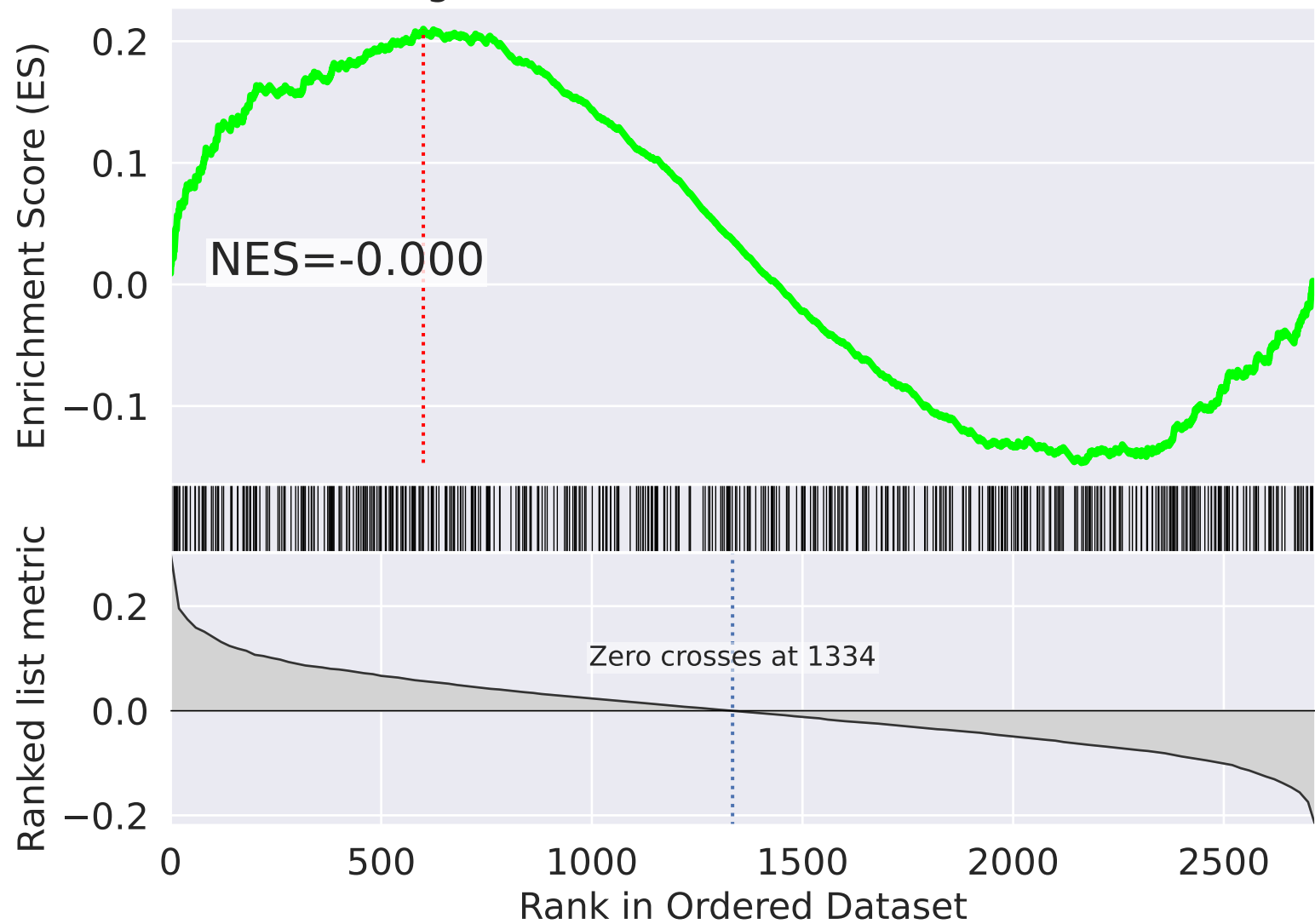
Signal Transduction R-HSA-162582



NES	SET
-4.458	Class I MHC Mediated Antigen Processing And Presentation R-HSA-983169
-4.241	Antigen Processing: Ubiquitination And Proteasome Degradation R-HSA-983168
-3.698	Adaptive Immune System R-HSA-1280218
-3.681	APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
-3.663	Regulation Of APC/C Activators Between G1/S And Early Anaphase R-HSA-176408
-3.507	FCGR3A-mediated Phagocytosis R-HSA-9664422
-3.472	SCF(Skp2)-mediated Degradation Of P27/P21 R-HSA-187577
-3.472	Activation Of APC/C And APC/C:Cdc20 Mediated Degradation Of Mitotic Proteins R-HSA-176814
-3.458	G2/M Checkpoints R-HSA-69481
-3.450	APC/C:Cdc20 Mediated Degradation Of Mitotic Proteins R-HSA-176409
-3.445	RHO GTPase Effectors R-HSA-195258
-3.442	CDK-mediated Phosphorylation And Removal Of Cdc6 R-HSA-69017
-3.344	Switching Of Origins To A Post-Replicative State R-HSA-69052
-3.286	Cdc20:Phospho-APC/C Mediated Degradation Of Cyclin A R-HSA-174184
-3.286	APC:Cdc20 Mediated Degradation Of Cell Cycle Proteins Before Cycle Checkpoint Satisfied R-HSA-179419

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=51$

Signal Transduction R-HSA-162582



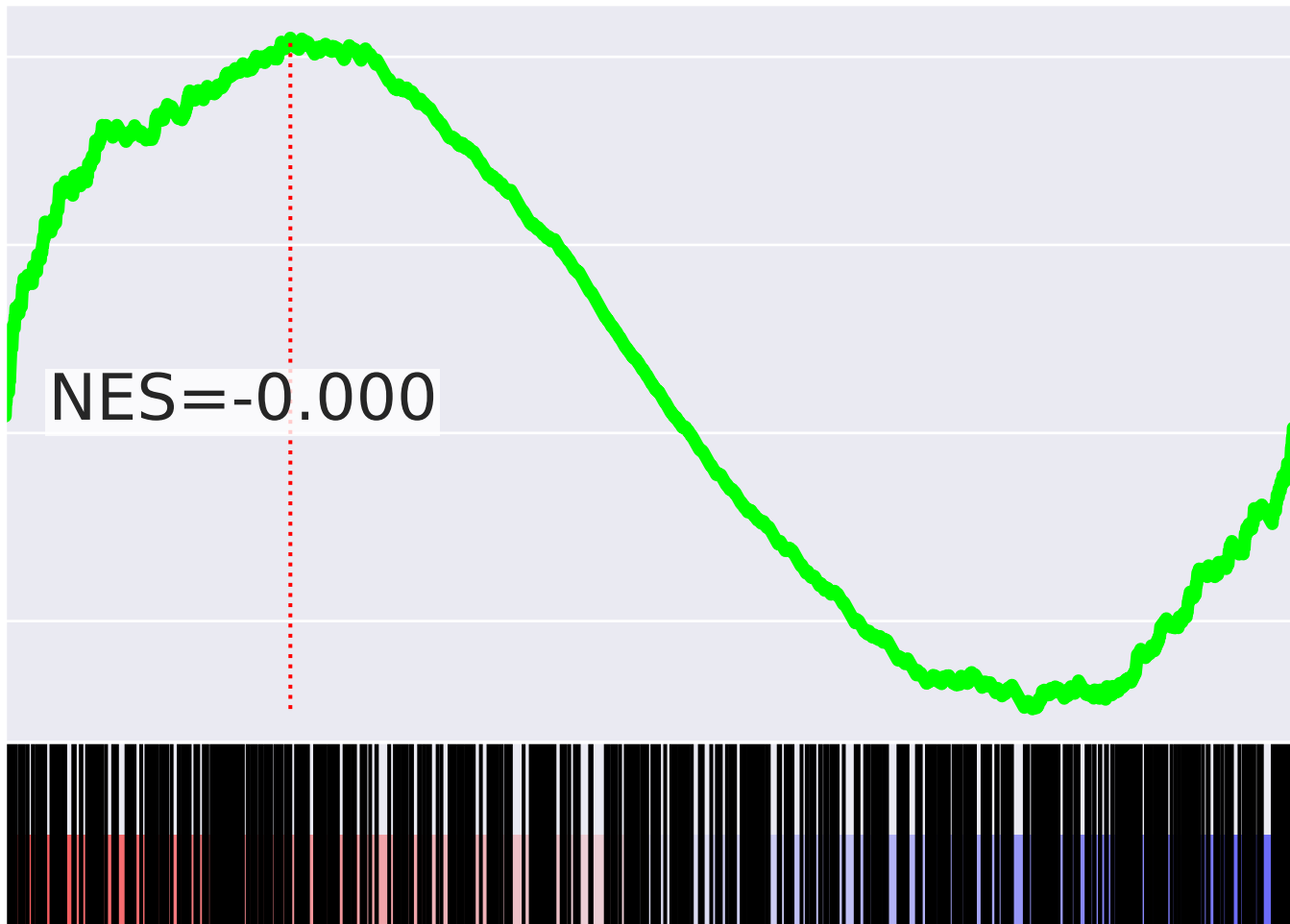
Signal Transduction R-HSA-162582

ES

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0.1
0.0
-0.1

NES=-0.000

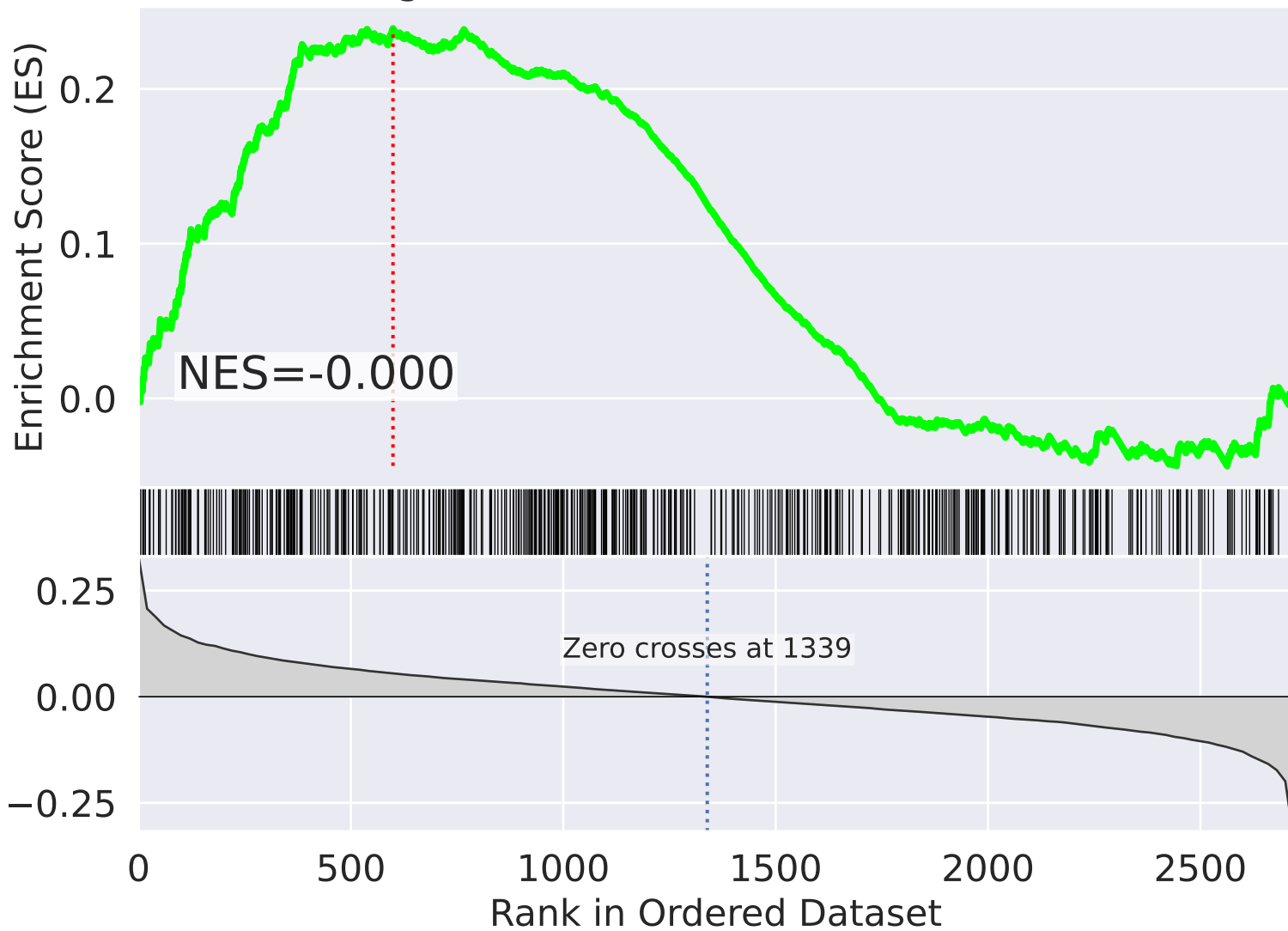
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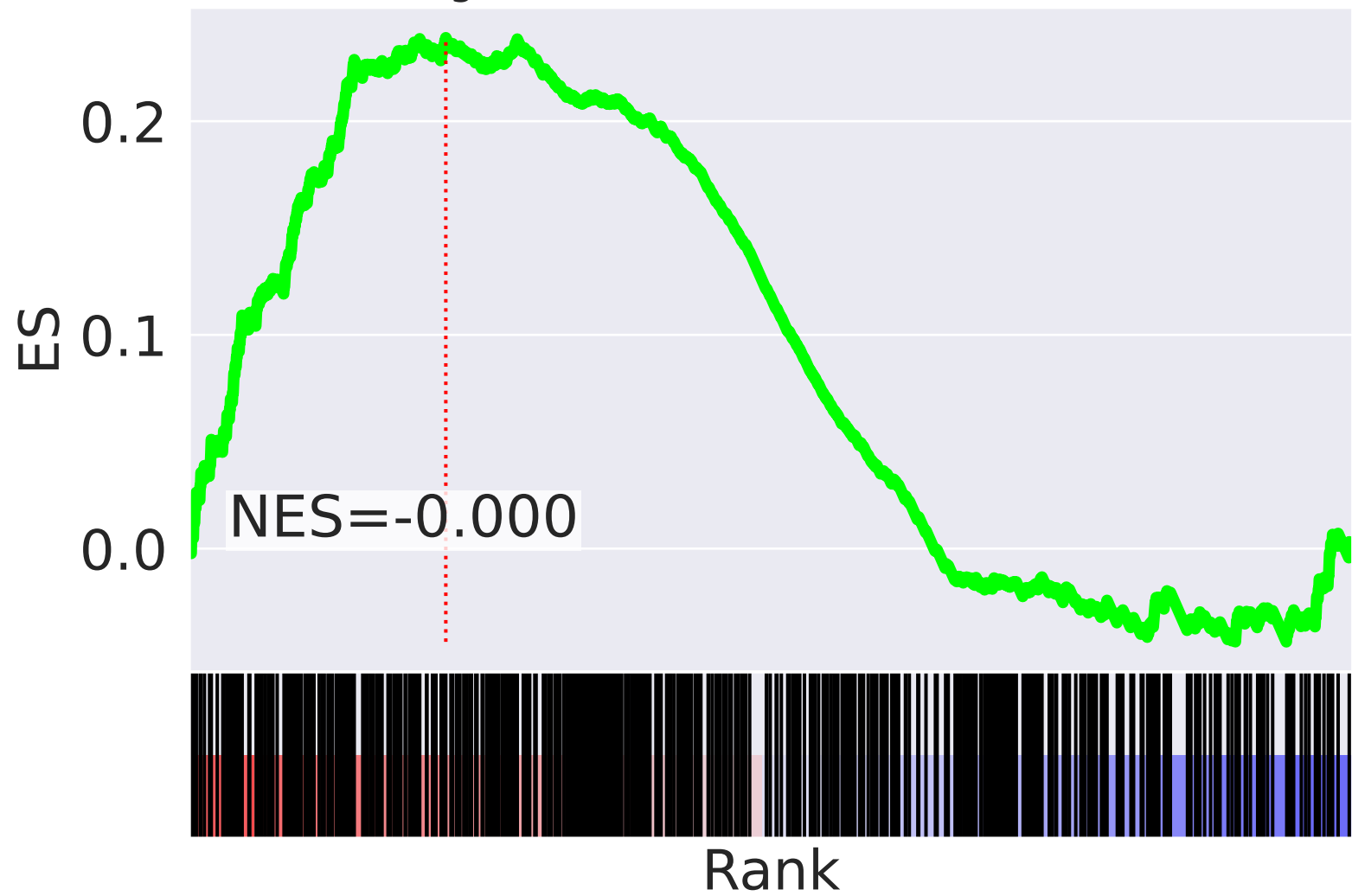
NES		SET
5.805		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
5.293		Mitotic Anaphase R-HSA-68882
5.220		M Phase R-HSA-68886
5.191		Mitotic Metaphase And Anaphase R-HSA-2555396
5.164		mRNA Splicing - Major Pathway R-HSA-72163
5.106		Separation Of Sister Chromatids R-HSA-2467813
5.052		mRNA Splicing R-HSA-72172
4.313		Disorders Of Transmembrane Transporters R-HSA-5619115
4.301		Host Interactions Of HIV Factors R-HSA-162909
-4.251		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
4.204		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
4.195		Mitotic Spindle Checkpoint R-HSA-69618
4.102		RHO GTPases Activate Formins R-HSA-5663220
4.047		Switching Of Origins To A Post-Replicative State R-HSA-69052
-4.045		Chromatin Modifying Enzymes R-HSA-3247509

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=52$

Signal Transduction R-HSA-162582



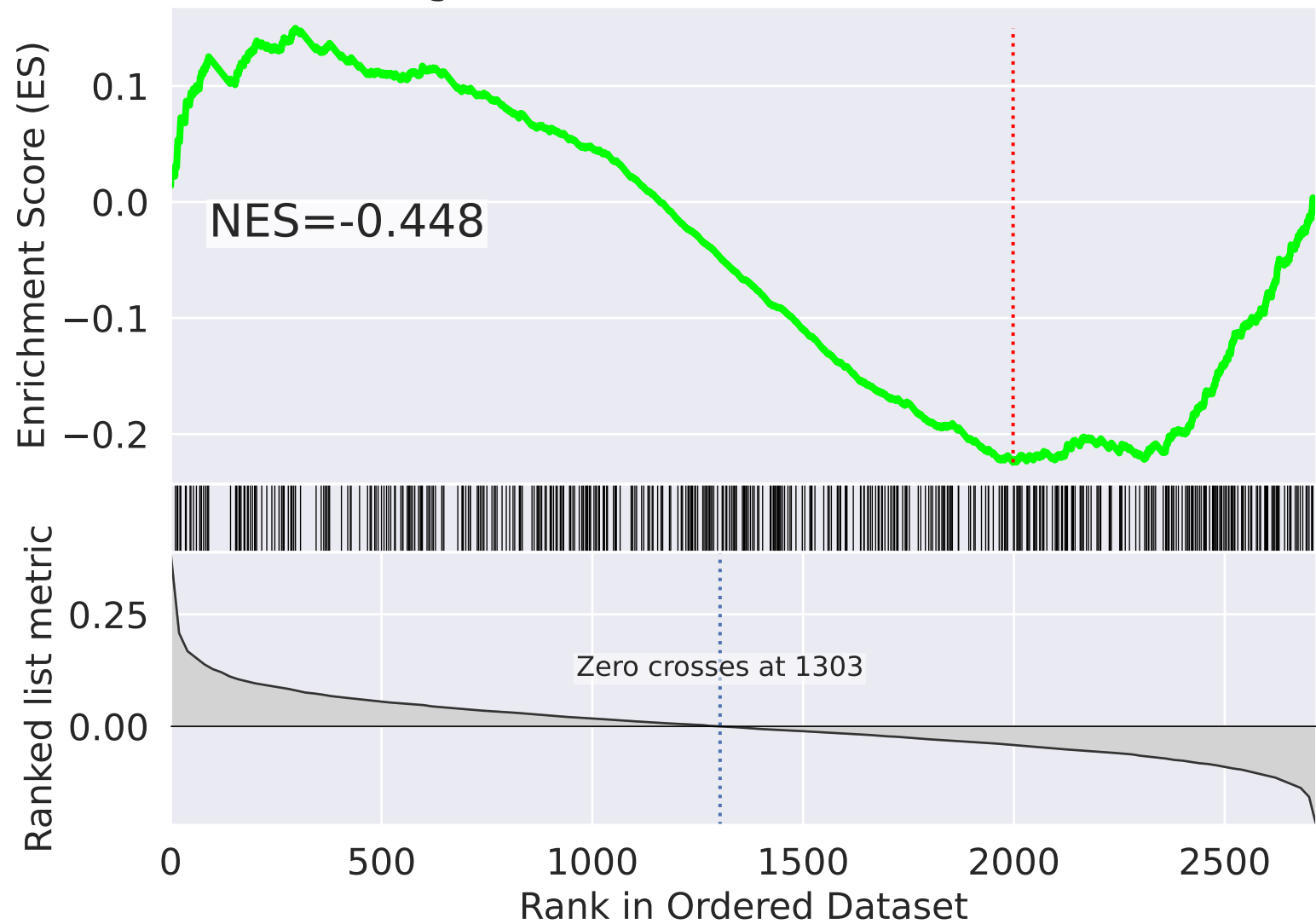
Signal Transduction R-HSA-162582



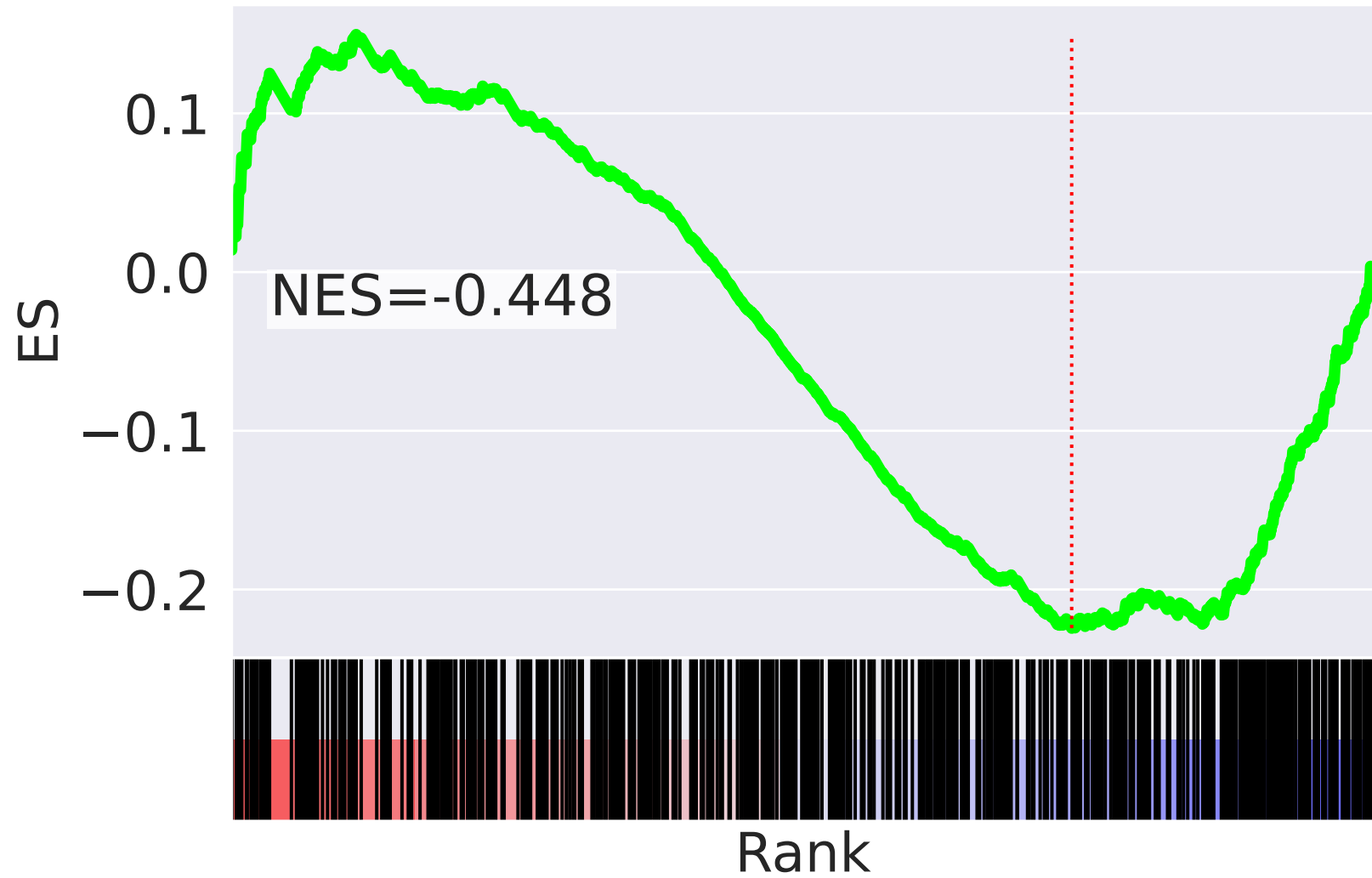
NES	SET
7.121	Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
6.653	mRNA Splicing R-HSA-72172
6.575	mRNA Splicing - Major Pathway R-HSA-72163
5.229	HIV Infection R-HSA-162906
5.055	S Phase R-HSA-69242
4.773	M Phase R-HSA-68886
4.581	Mitotic Metaphase And Anaphase R-HSA-2555396
4.566	Mitotic Anaphase R-HSA-68882
4.517	DNA Replication R-HSA-69306
4.506	Separation Of Sister Chromatids R-HSA-2467813
4.445	Synthesis Of DNA R-HSA-69239
4.415	Host Interactions Of HIV Factors R-HSA-162909
4.411	G1/S Transition R-HSA-69206
4.366	Disorders Of Transmembrane Transporters R-HSA-5619115
4.353	DNA Replication Pre-Initiation R-HSA-69002

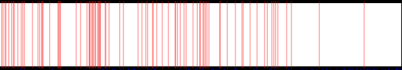

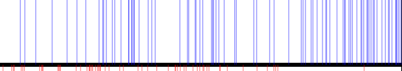
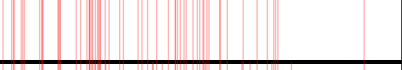
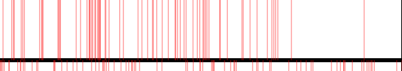
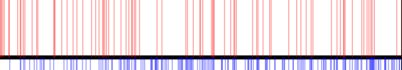


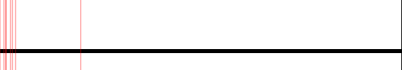
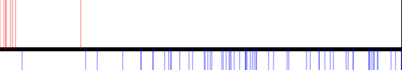
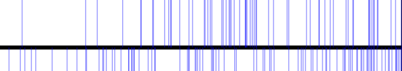
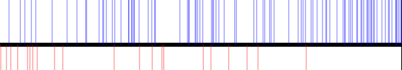

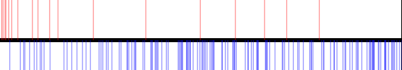

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=53$

Signal Transduction R-HSA-162582



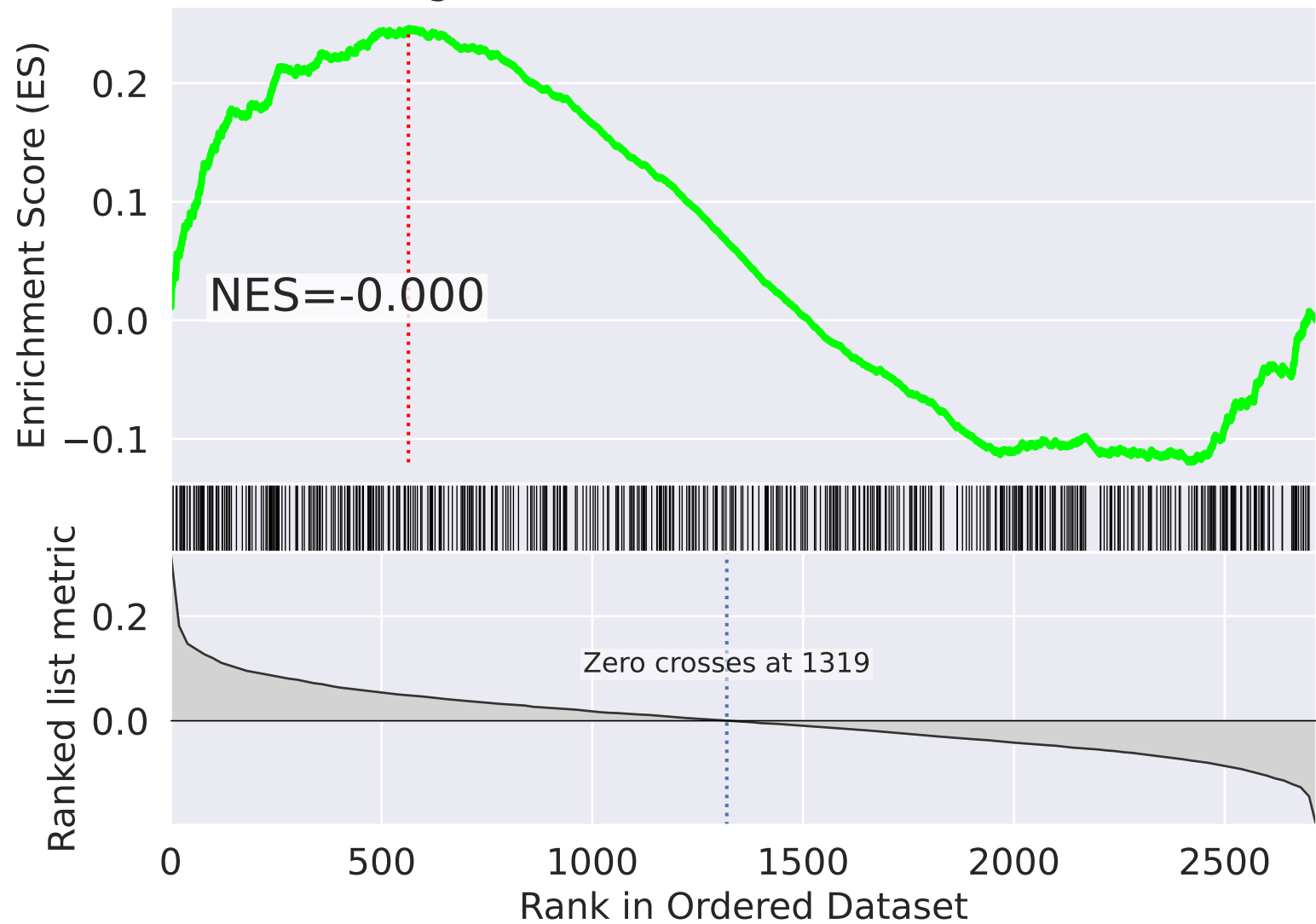
Signal Transduction R-HSA-162582



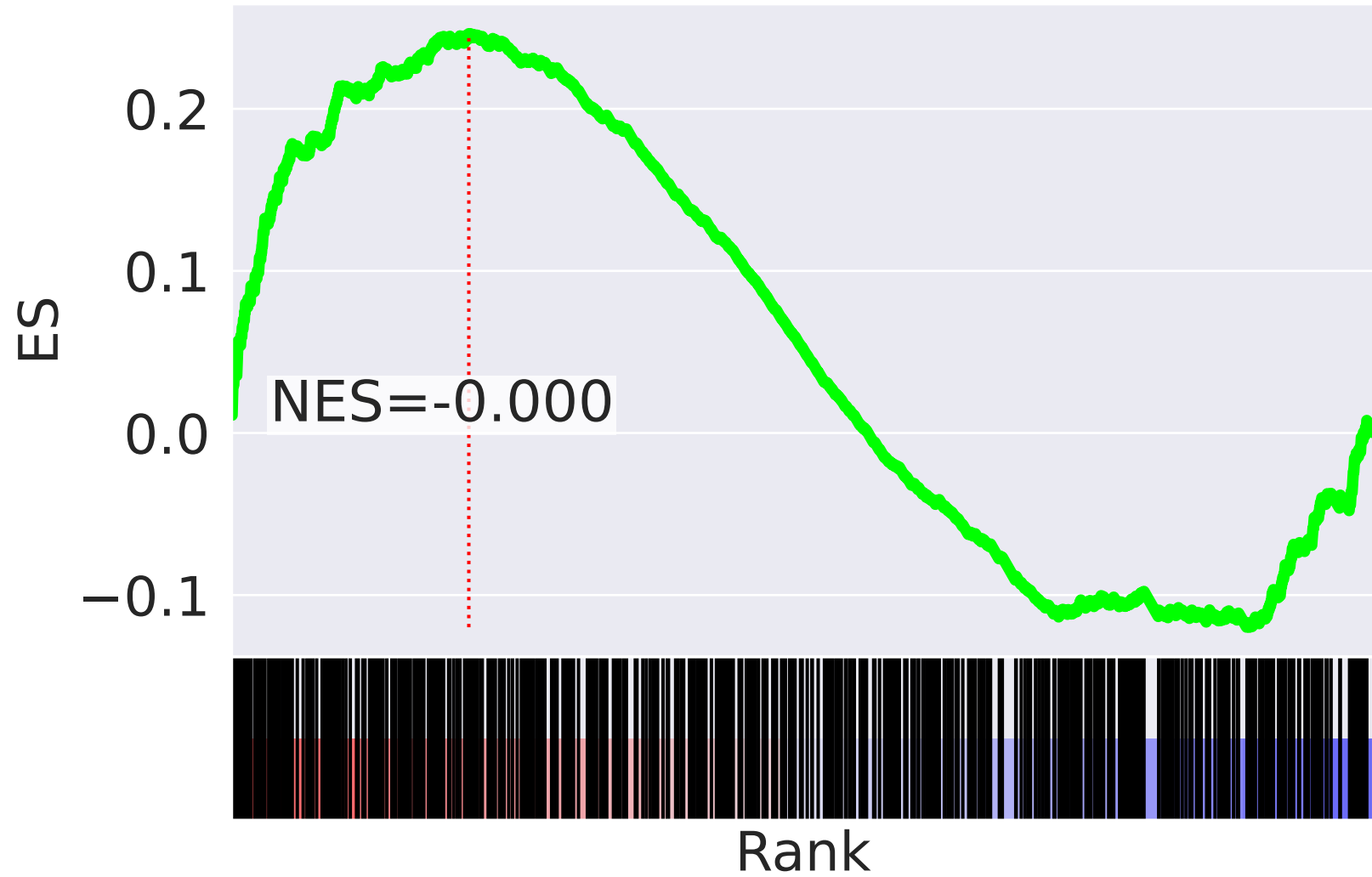
NES		SET
4.795		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
-4.286		MAPK1/MAPK3 Signaling R-HSA-5684996
-4.238		RAF/MAP Kinase Cascade R-HSA-5673001
4.159		Respiratory Electron Transport R-HSA-611105
4.155		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
3.737		Transcriptional Regulation By RUNX1 R-HSA-8878171
-3.730		M Phase R-HSA-68886
-3.555		Cell Cycle Checkpoints R-HSA-69620
3.468		Heme Biosynthesis R-HSA-189451
3.468		Metabolism Of Porphyrins R-HSA-189445
-3.427		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
-3.425		MAPK Family Signaling Cascades R-HSA-5683057
3.419		PKMTs Methylate Histone Lysines R-HSA-3214841
3.382		Pyruvate Metabolism And Citric Acid (TCA) Cycle R-HSA-71406
-3.324		Mitotic Metaphase And Anaphase R-HSA-2555396

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=54$

Signal Transduction R-HSA-162582



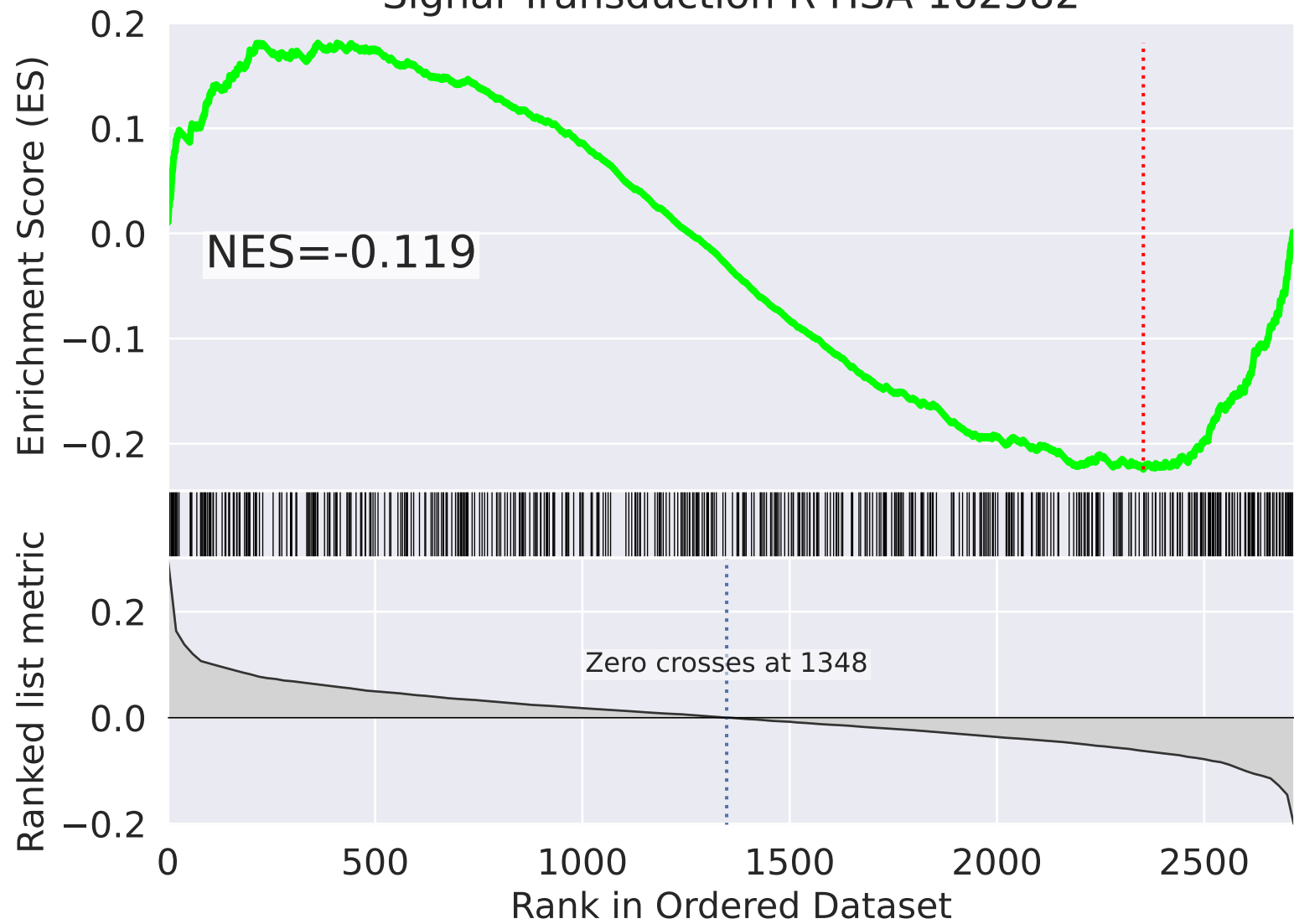
Signal Transduction R-HSA-162582



NES		SET
3.532		MTOR Signaling R-HSA-165159
-3.529		Processing Of DNA Double-Strand Break Ends R-HSA-5693607
3.494		Transcriptional Regulation By RUNX1 R-HSA-8878171
-3.154		G2/M DNA Damage Checkpoint R-HSA-69473
-3.141		Extension Of Telomeres R-HSA-180786
-3.089		Telomere Maintenance R-HSA-157579
3.047		Metabolism Of Porphyrins R-HSA-189445
3.047		Heme Biosynthesis R-HSA-189451
-3.022		COPII-mediated Vesicle Transport R-HSA-204005
2.959		Regulation Of RUNX1 Expression And Activity R-HSA-8934593
-2.944		G2/M Checkpoints R-HSA-69481
-2.940		Complex I Biogenesis R-HSA-6799198
2.852		Transcriptional Regulation Of Granulopoiesis R-HSA-9616222
2.851		Energy Dependent Regulation Of mTOR By LKB1-AMPK R-HSA-380972
-2.833		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=55$

Signal Transduction R-HSA-162582



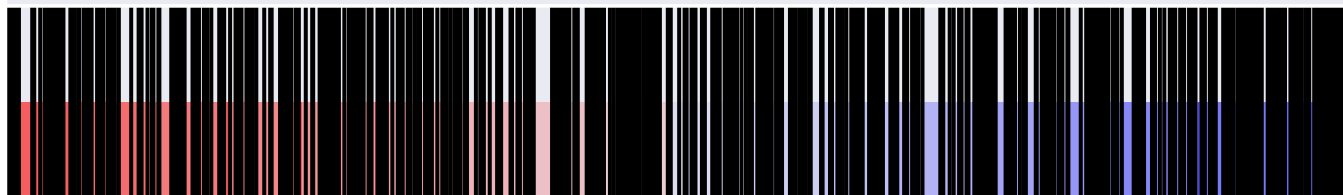
Signal Transduction R-HSA-162582

ES

NES=-0.119





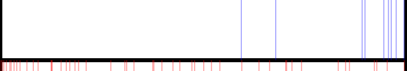
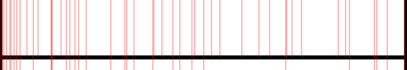
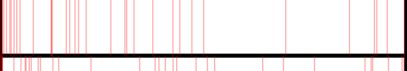
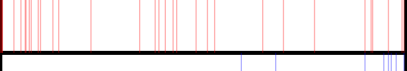
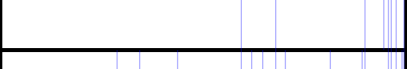



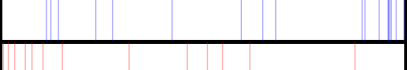


0.2
0.1
0.0
-0.1
-0.2

Rank



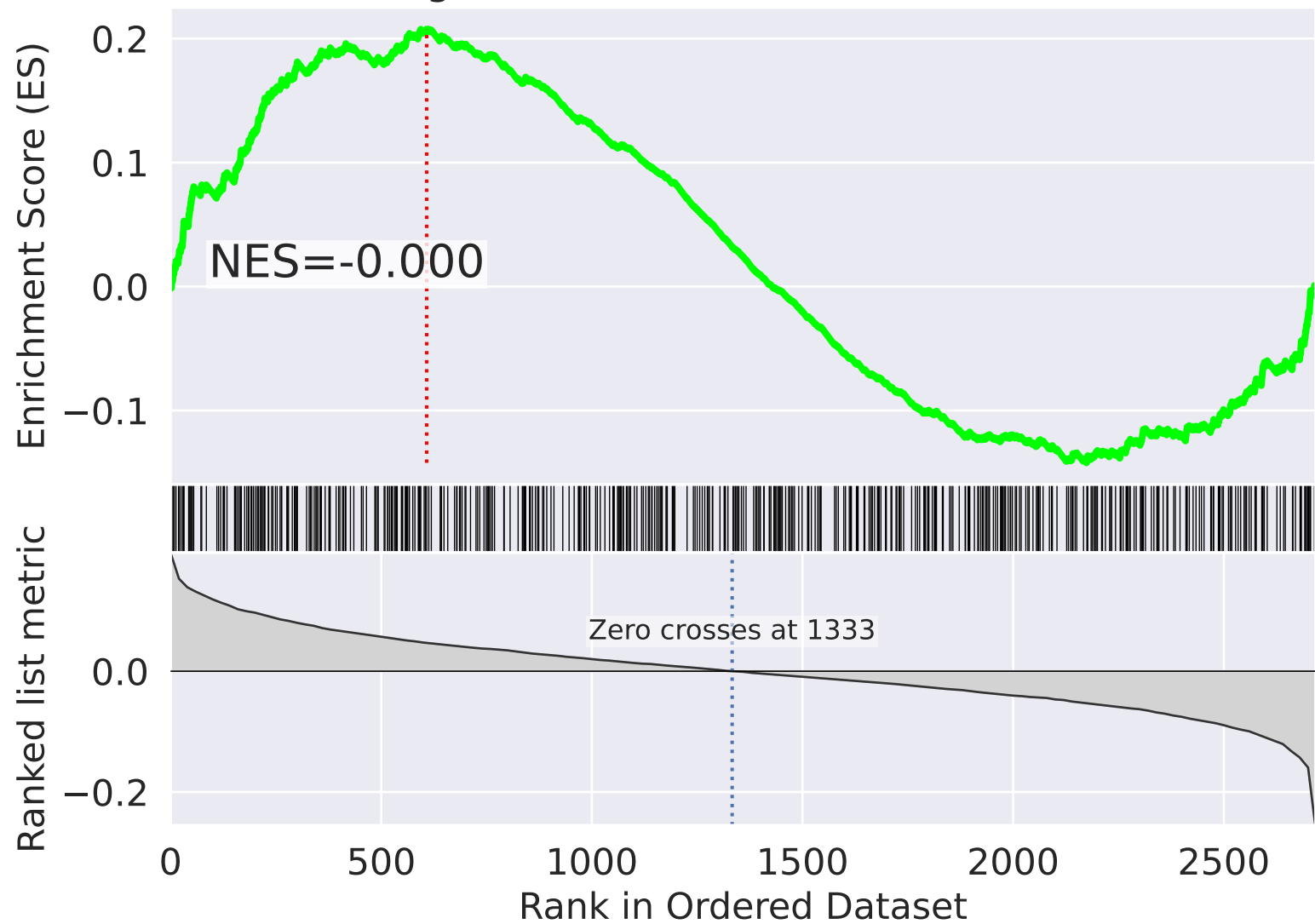
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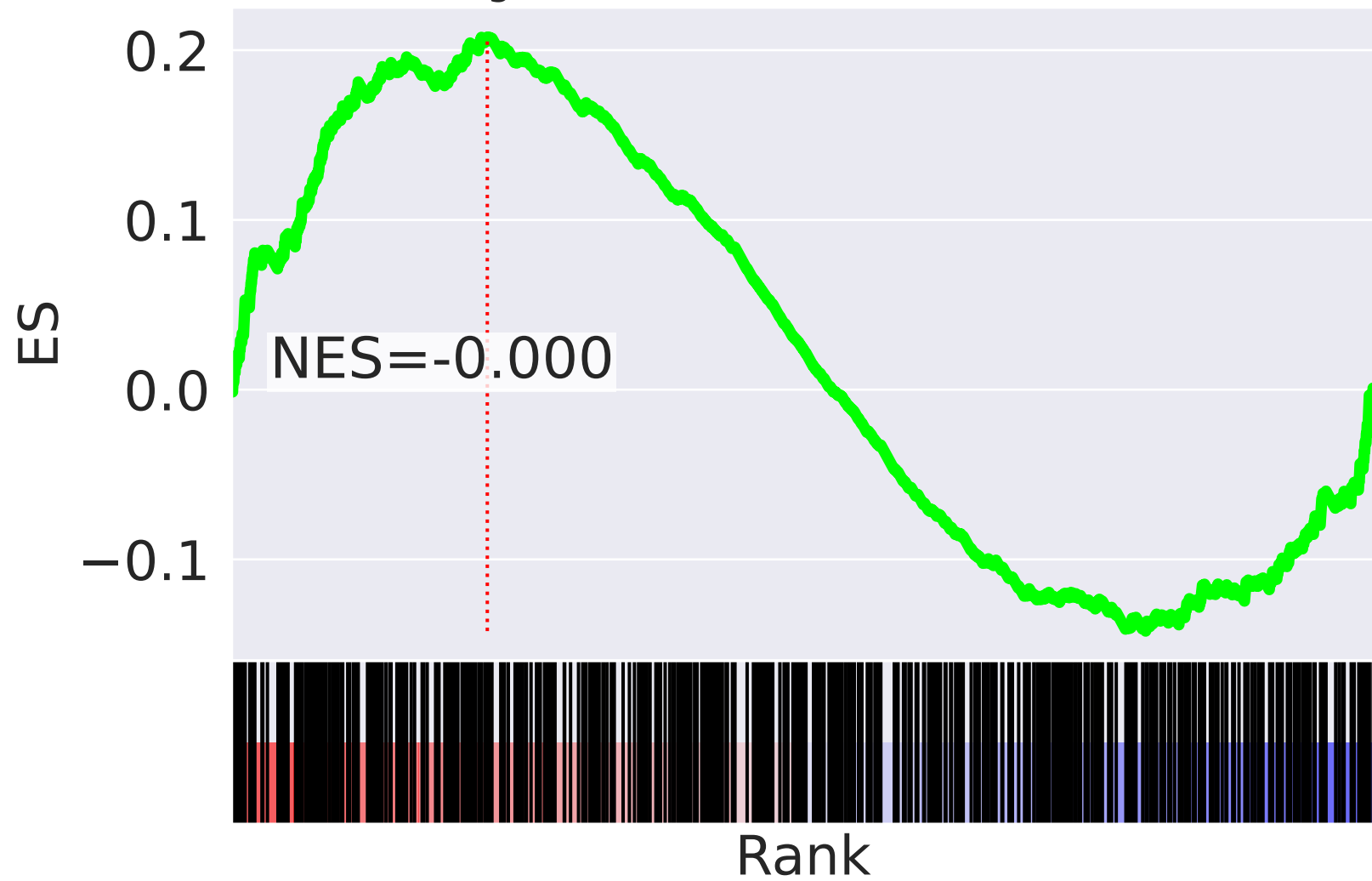
-3.372		Signaling By ERBB2 KD Mutants R-HSA-9664565
-3.326		Signaling By ERBB2 In Cancer R-HSA-1227990
-3.220		Signaling By ERBB2 ECD Mutants R-HSA-9665348
-3.180		Signaling By EGFR In Cancer R-HSA-1643713
-3.180		Constitutive Signaling By Ligand-Responsive EGFR Cancer Variants R-HSA-1236382
3.067		Mitotic Prophase R-HSA-68875
3.058		Nuclear Envelope Breakdown R-HSA-2980766
2.978		VEGFA-VEGFR2 Pathway R-HSA-4420097
-2.968		Constitutive Signaling By EGFRvIII R-HSA-5637810
-2.938		Signaling By EGFR R-HSA-177929
2.937		Leishmania Infection R-HSA-9658195
-2.936		Signaling By ERBB2 TMD/JMD Mutants R-HSA-9665686
-2.844		Signaling By ERBB4 R-HSA-1236394
2.821		Muscle Contraction R-HSA-397014
-2.821		PI3K Events In ERBB2 Signaling R-HSA-1963642



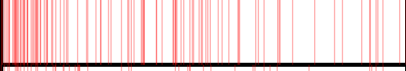
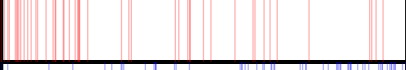
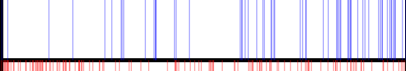
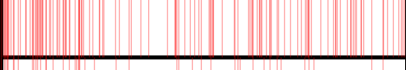
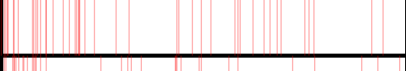
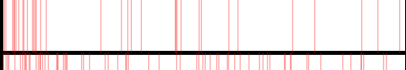
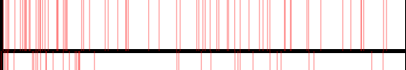


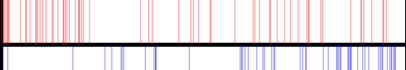

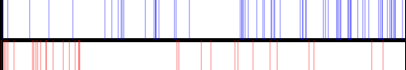

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=56$

Signal Transduction R-HSA-162582



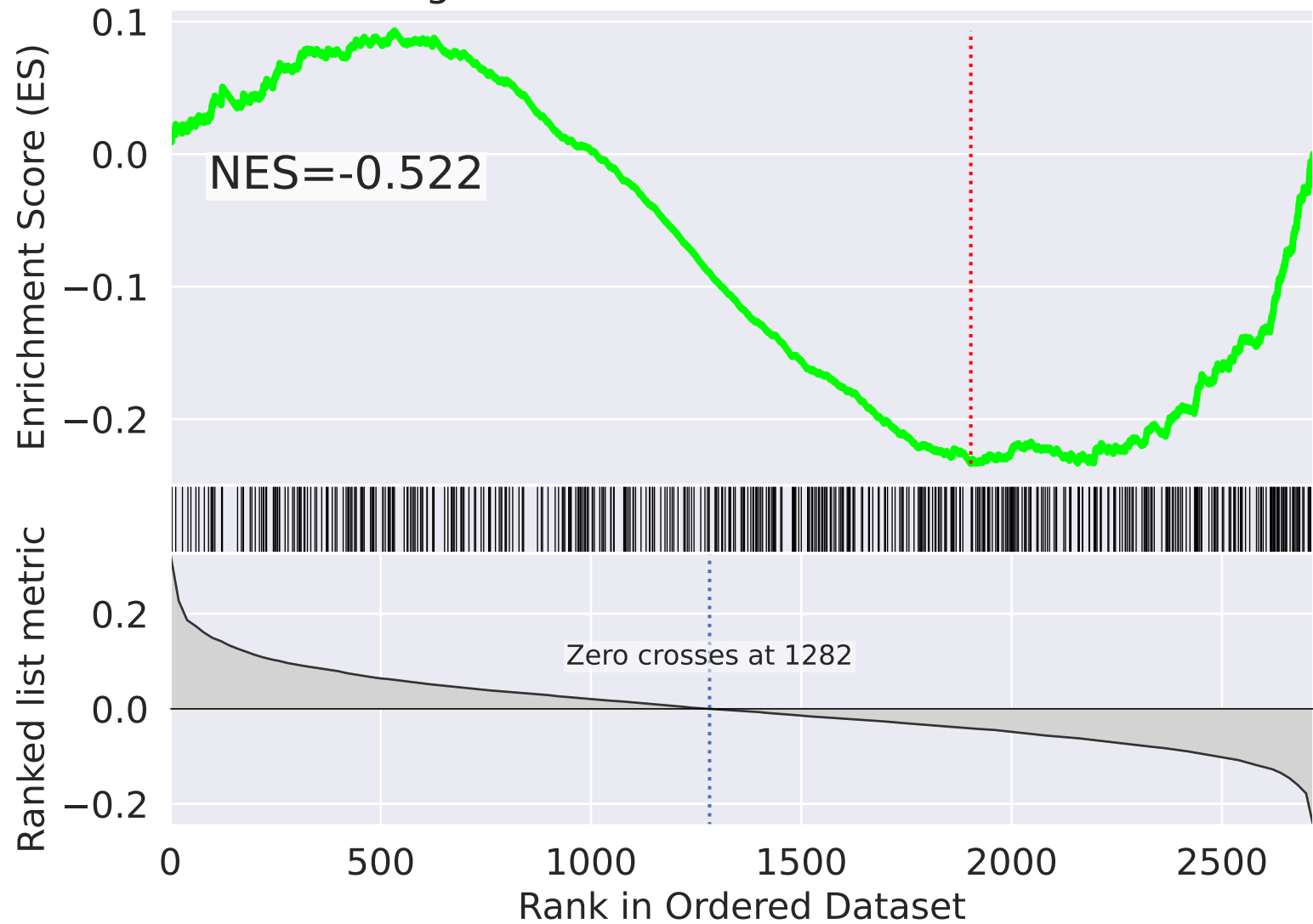
Signal Transduction R-HSA-162582



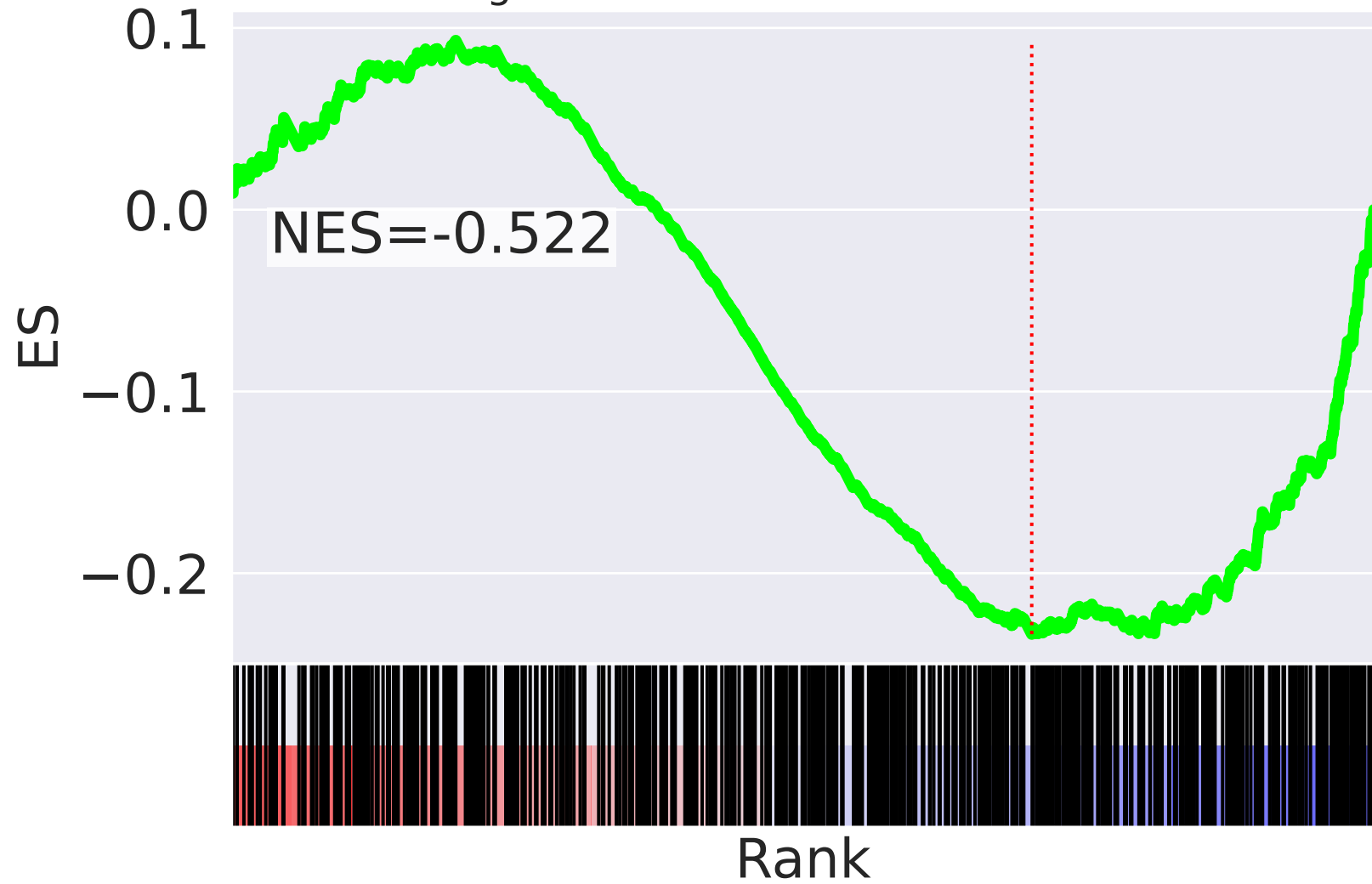
NES		SET
6.605		mRNA Splicing - Major Pathway R-HSA-72163
6.550		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
6.340		mRNA Splicing R-HSA-72172
4.306		Transport Of Mature Transcript To Cytoplasm R-HSA-72202
-4.251		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
4.190		HIV Infection R-HSA-162906
4.174		Influenza Infection R-HSA-168255
4.149		mRNA Splicing - Minor Pathway R-HSA-72165
4.149		Metabolism Of Amino Acids And Derivatives R-HSA-71291
4.094		Influenza Viral RNA Transcription And Replication R-HSA-168273
4.087		Host Interactions Of HIV Factors R-HSA-162909
4.058		Disorders Of Transmembrane Transporters R-HSA-5619115
-4.053		Major Pathway Of rRNA Processing In Nucleolus And Cytosol R-HSA-6791226
-4.047		rRNA Processing R-HSA-72312
4.041		Viral Messenger RNA Synthesis R-HSA-168325

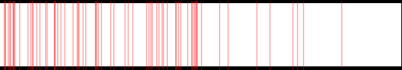
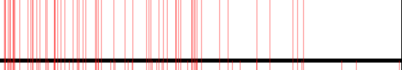
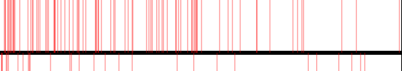
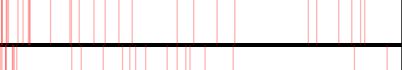
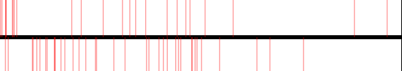
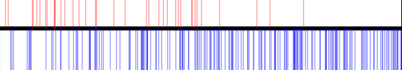
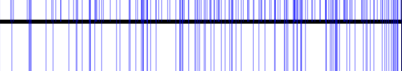
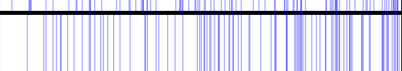

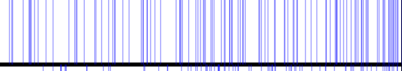
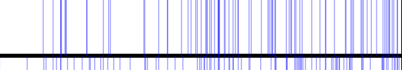
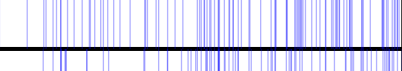
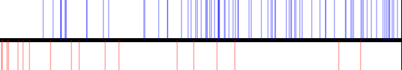


The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=57$

Signal Transduction R-HSA-162582



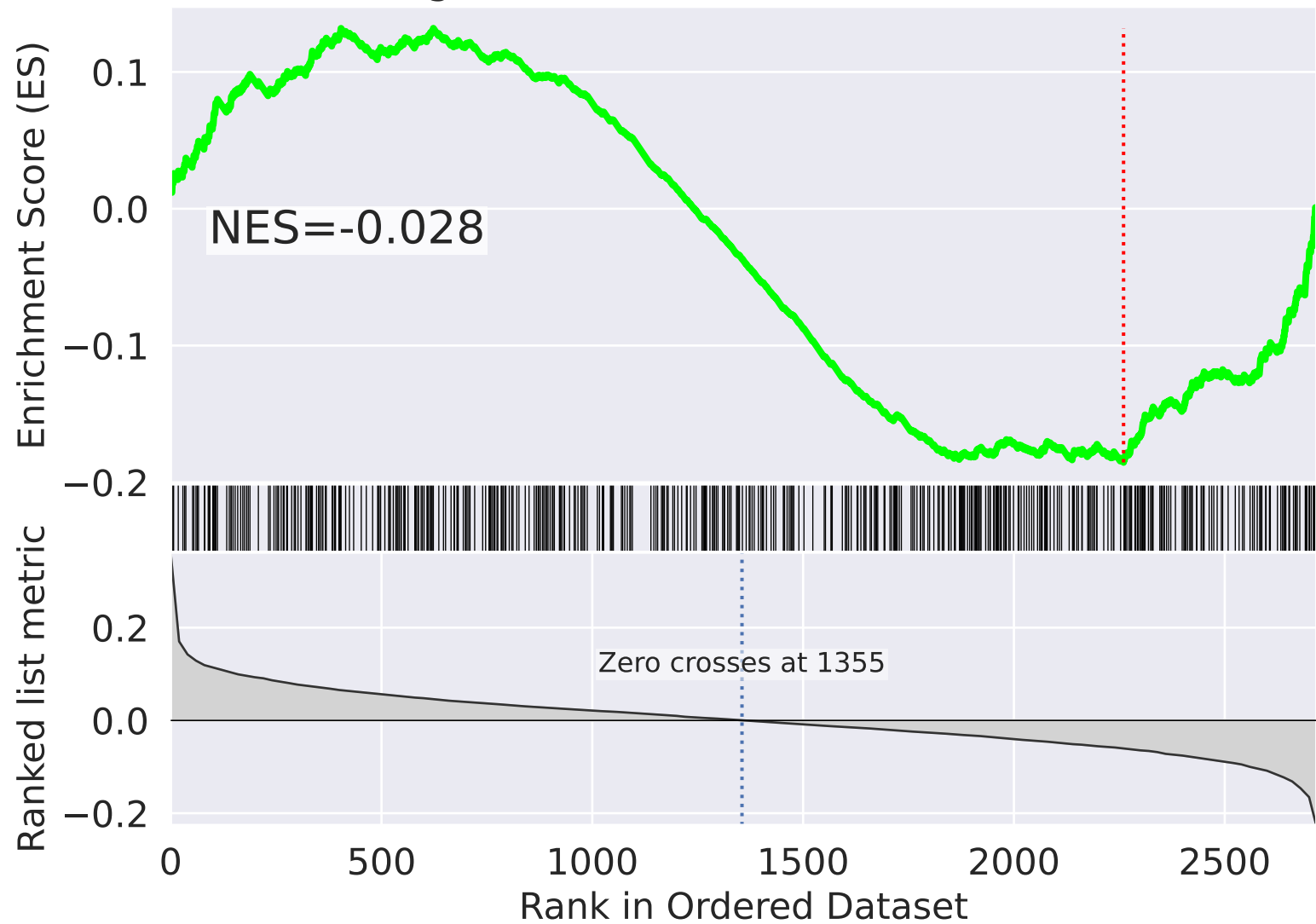
Signal Transduction R-HSA-162582



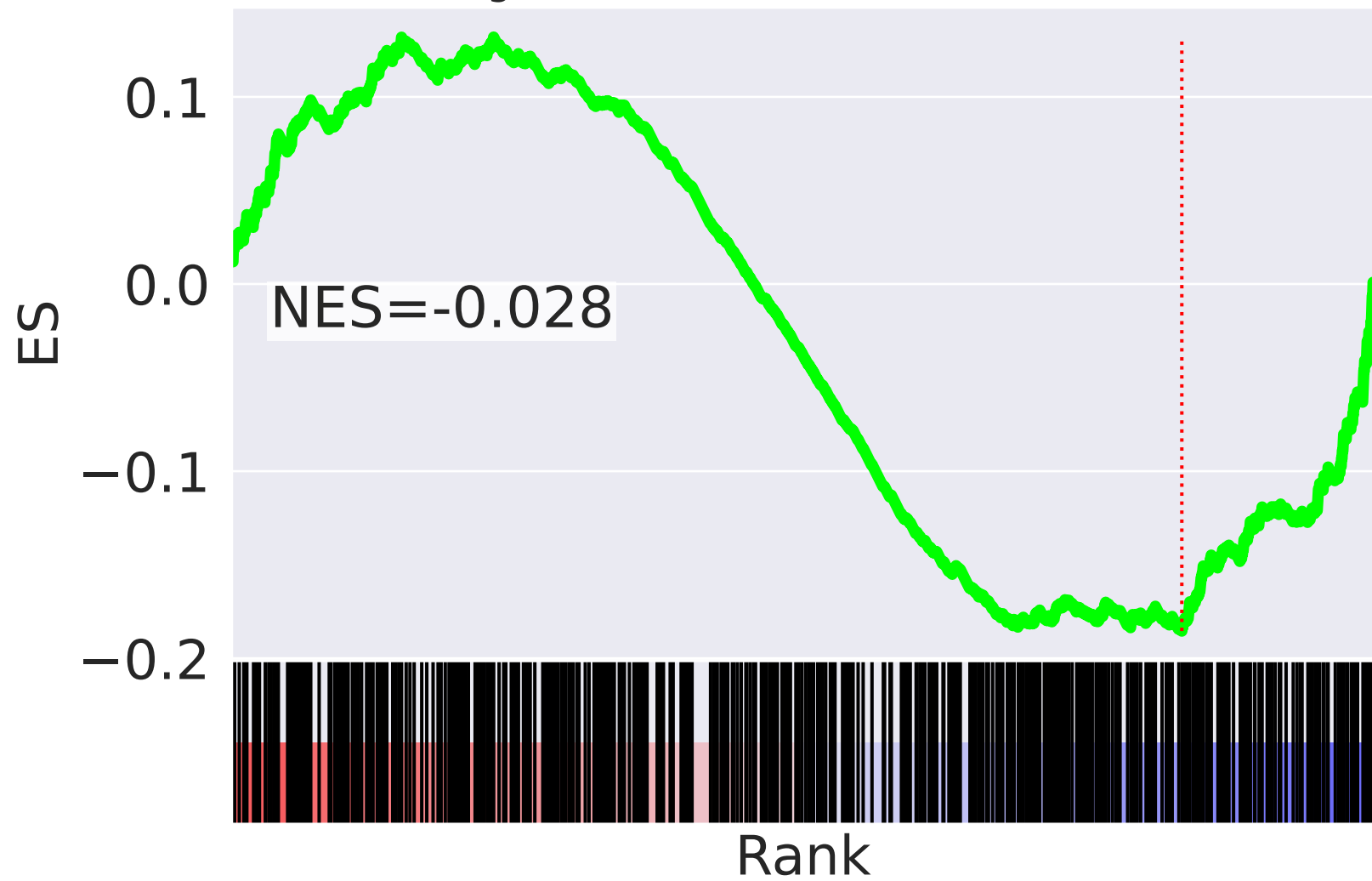
NES		SET
5.309		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
5.218		Respiratory Electron Transport R-HSA-611105
5.106		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
3.844		Metabolism Of Vitamins And Cofactors R-HSA-196854
3.809		Metabolism Of Nucleotides R-HSA-15869
3.806		Complex I Biogenesis R-HSA-6799198
-3.765		M Phase R-HSA-68886
-3.524		Mitotic Prometaphase R-HSA-68877
-3.488		Mitotic G2-G2/M Phases R-HSA-453274
3.471		Nucleotide Biosynthesis R-HSA-8956320
-3.455		RHO GTPase Effectors R-HSA-195258
-3.357		MAPK1/MAPK3 Signaling R-HSA-5684996
-3.232		G2/M Transition R-HSA-69275
-3.212		RAF/MAP Kinase Cascade R-HSA-5673001
3.167		Metabolism Of Water-Soluble Vitamins And Cofactors R-HSA-196849

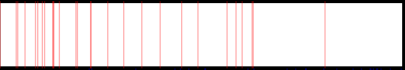
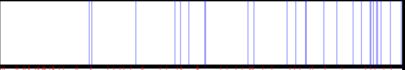
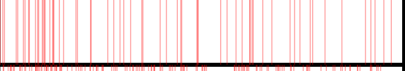

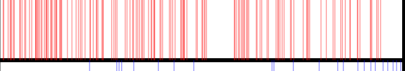
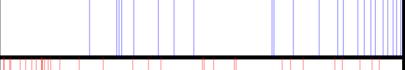
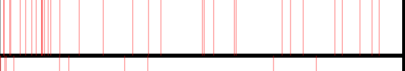
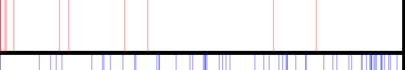
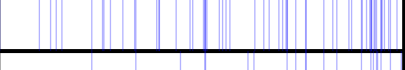
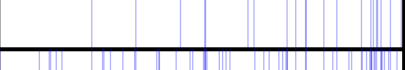
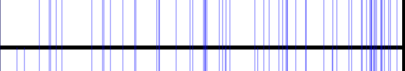
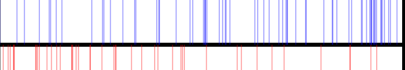
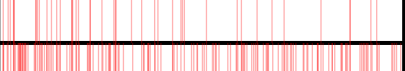
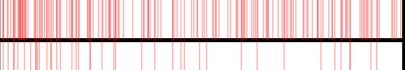
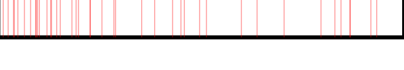
The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=58$

Signal Transduction R-HSA-162582



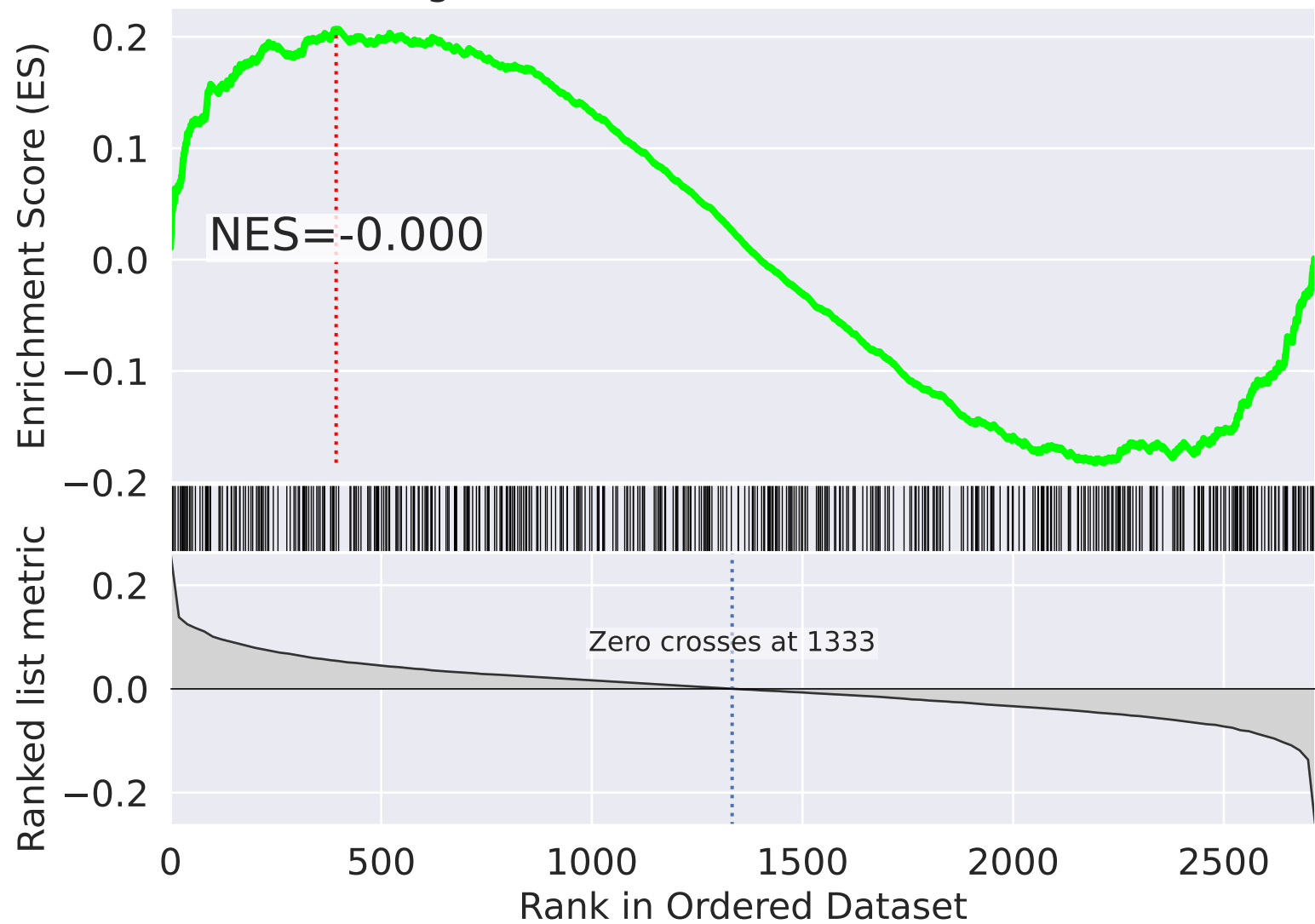
Signal Transduction R-HSA-162582



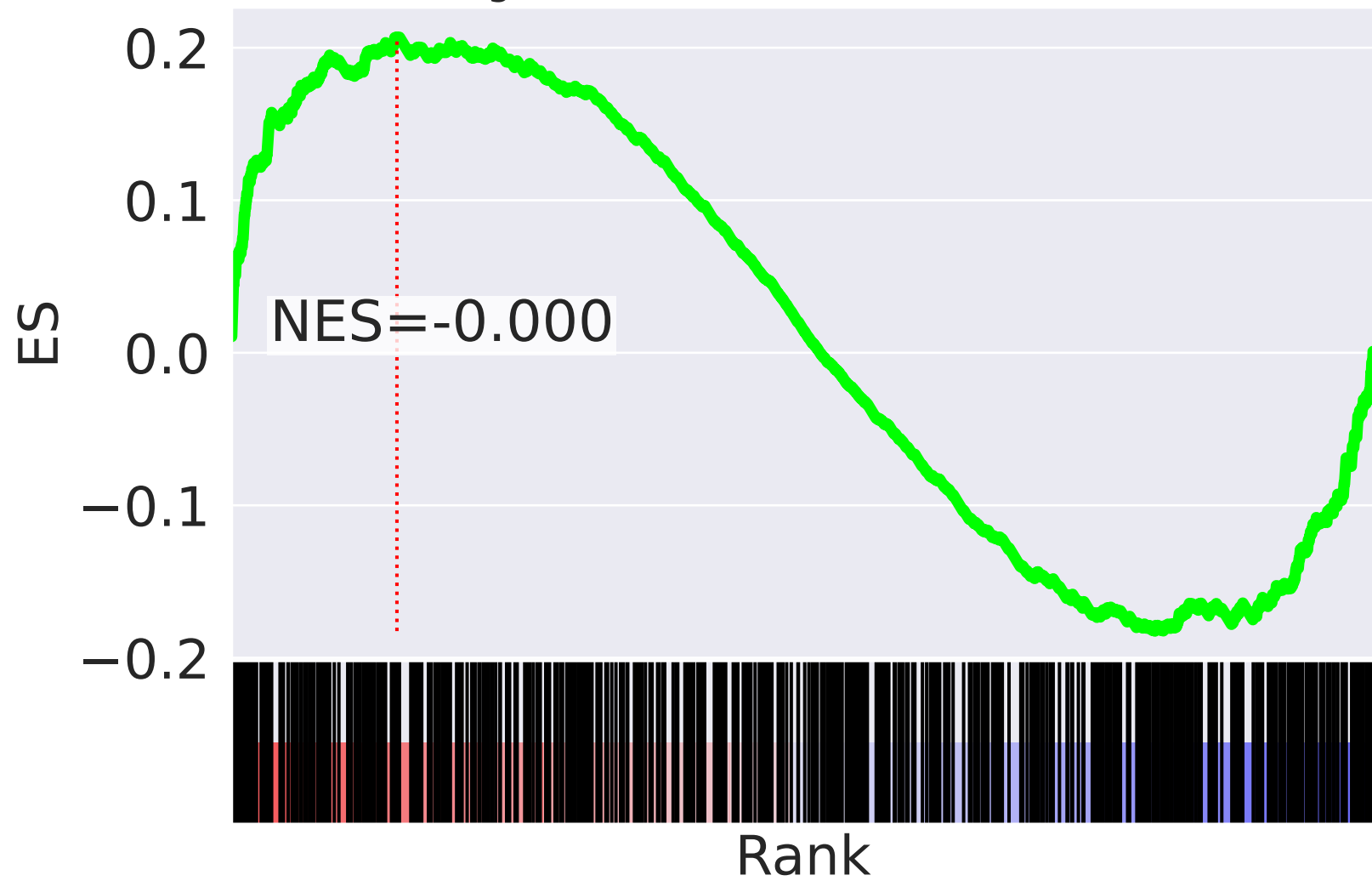
NES		SET
3.563		rRNA Modification In Nucleus And Cytosol R-HSA-6790901
-3.243		DNA Damage Bypass R-HSA-73893
3.169		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
3.157		Mitotic Anaphase R-HSA-68882
3.156		Mitotic Metaphase And Anaphase R-HSA-2555396
-3.155		P75 NTR Receptor-Mediated Signaling R-HSA-193704
3.131		Nuclear Envelope Breakdown R-HSA-2980766
3.130		Glycosaminoglycan Metabolism R-HSA-1630316
-3.119		HDR Thru Homologous Recombination (HRR) Or Single Strand Annealing (SSA) R-HSA-5693567
-3.096		Translesion Synthesis By Y Family DNA Polymerases Bypasses Lesions On DNA Template R-HSA-110313
-3.007		Homology Directed Repair R-HSA-5693538
-3.005		DNA Double-Strand Break Repair R-HSA-5693532
2.996		MAPK6/MAPK4 Signaling R-HSA-5687128
2.933		Cytokine Signaling In Immune System R-HSA-1280215
2.912		Role Of GTSE1 In G2/M Progression After G2 Checkpoint R-HSA-8852276



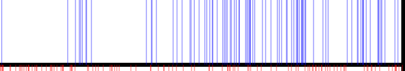
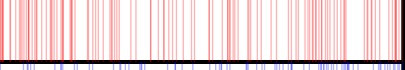
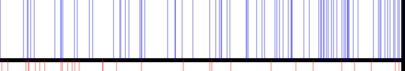


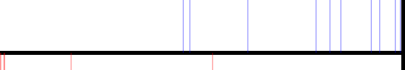

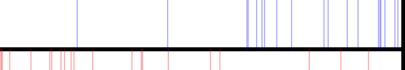
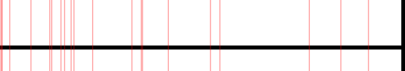


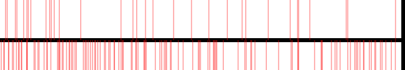

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=59$

Signal Transduction R-HSA-162582



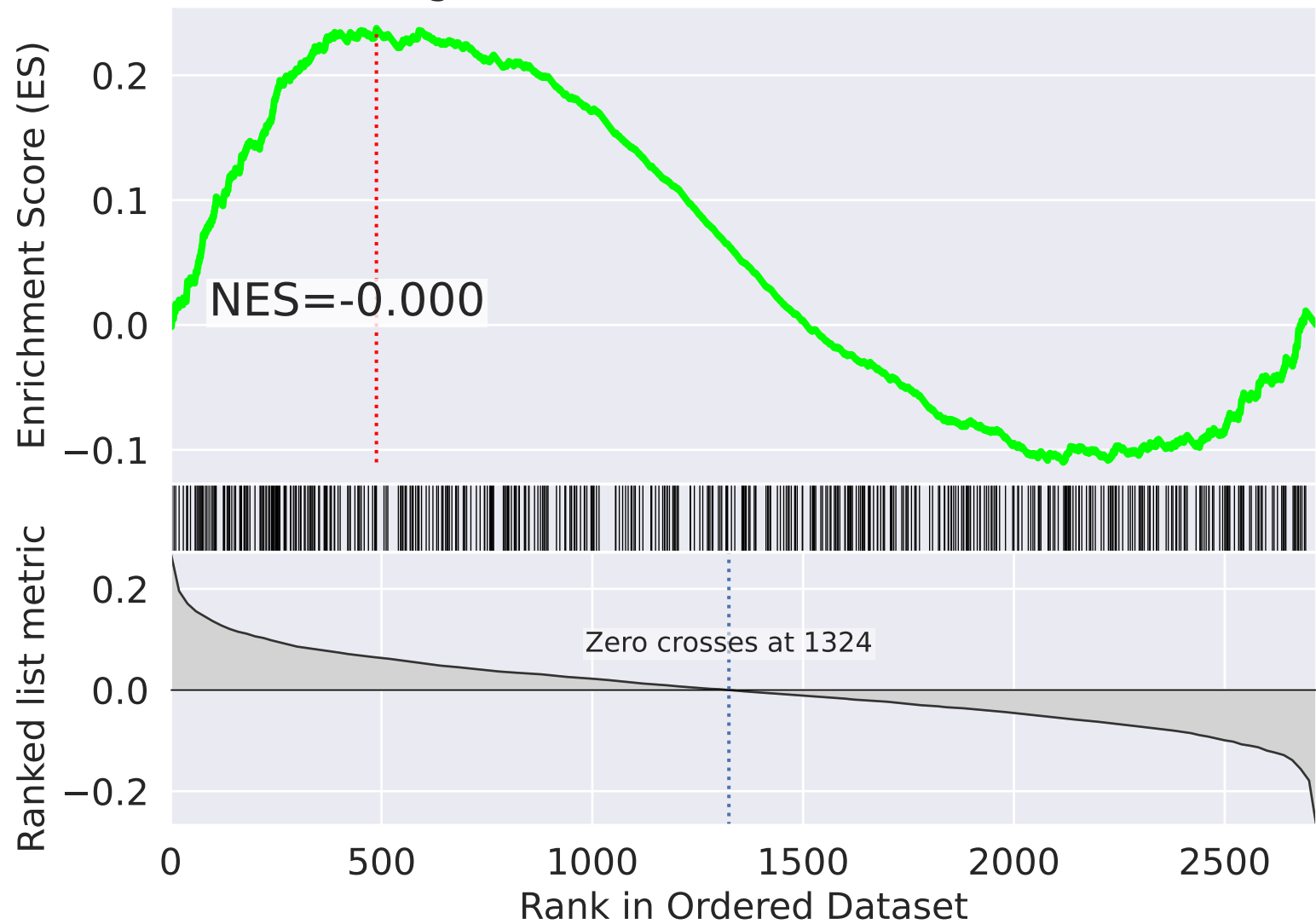
Signal Transduction R-HSA-162582



NES		SET
-3.737		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
-3.327		Potential Therapeutics For SARS R-HSA-9679191
-3.260		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
2.999		Nervous System Development R-HSA-9675108
-2.853		Organelle Biogenesis And Maintenance R-HSA-1852241
2.815		VEGFA-VEGFR2 Pathway R-HSA-4420097
-2.782		Formation Of ATP By Chemiosmotic Coupling R-HSA-163210
-2.771		FLT3 Signaling In Disease R-HSA-9682385
2.763		Frs2-mediated Activation R-HSA-170968
-2.745		Cristae Formation R-HSA-8949613
2.736		Interleukin-17 Signaling R-HSA-448424
2.736		MAP Kinase Activation R-HSA-450294
2.735		DCC Mediated Attractive Signaling R-HSA-418885
2.724		Unfolded Protein Response (UPR) R-HSA-381119
2.710		Metabolism Of Lipids R-HSA-556833

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=60$

Signal Transduction R-HSA-162582



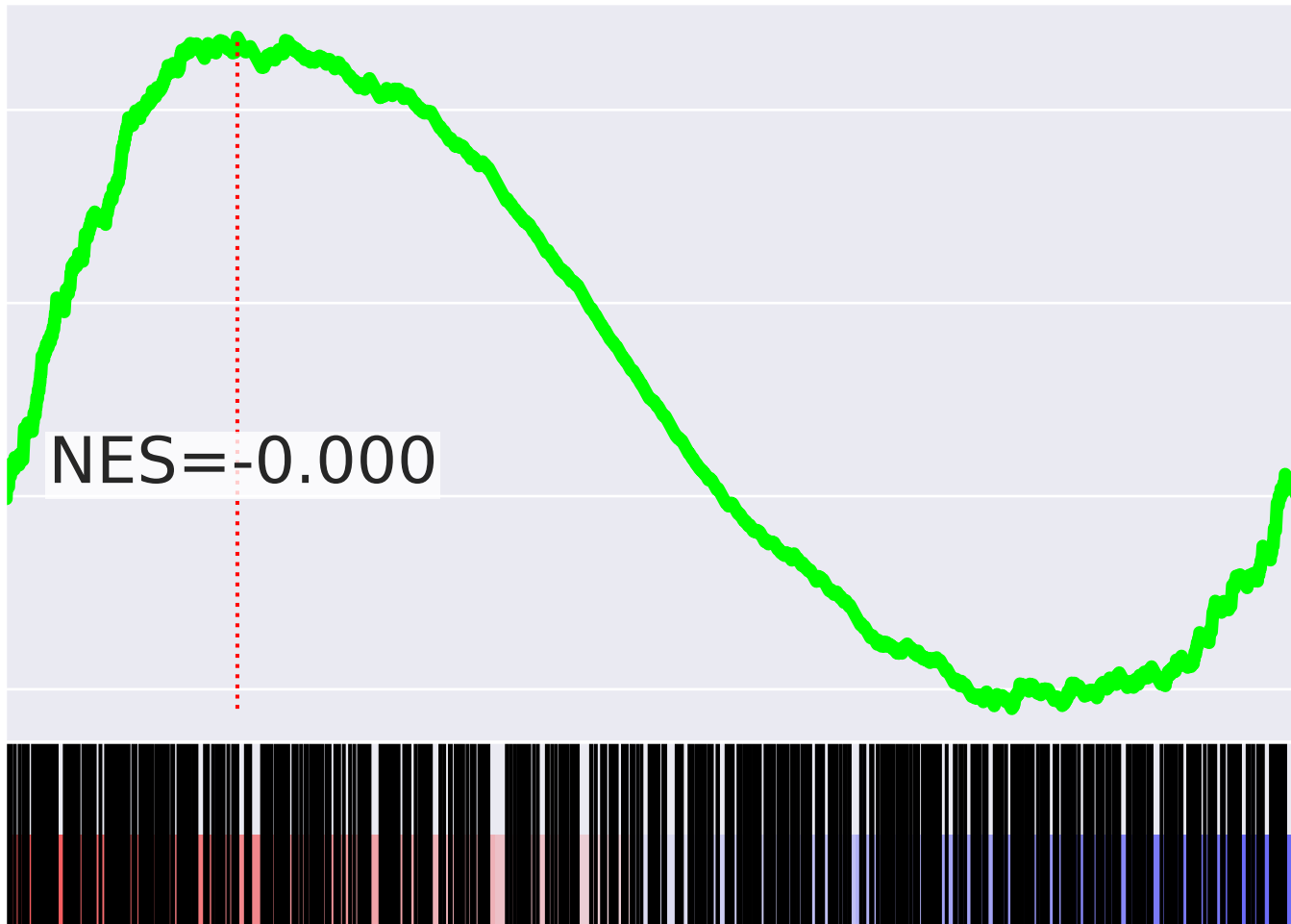
Signal Transduction R-HSA-162582

ES

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0.1
0.0
-0.1

NES=-0.000

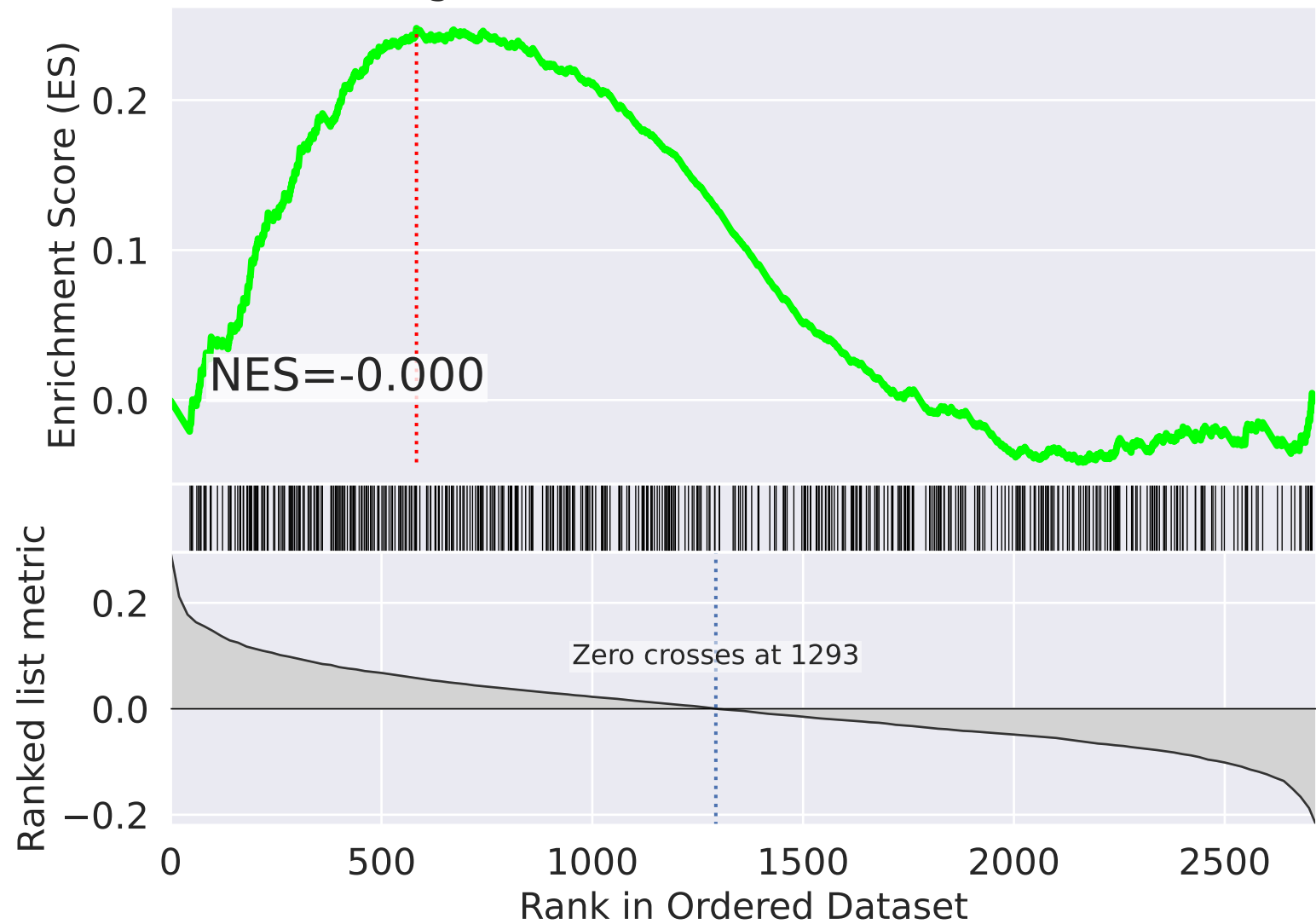
Rank



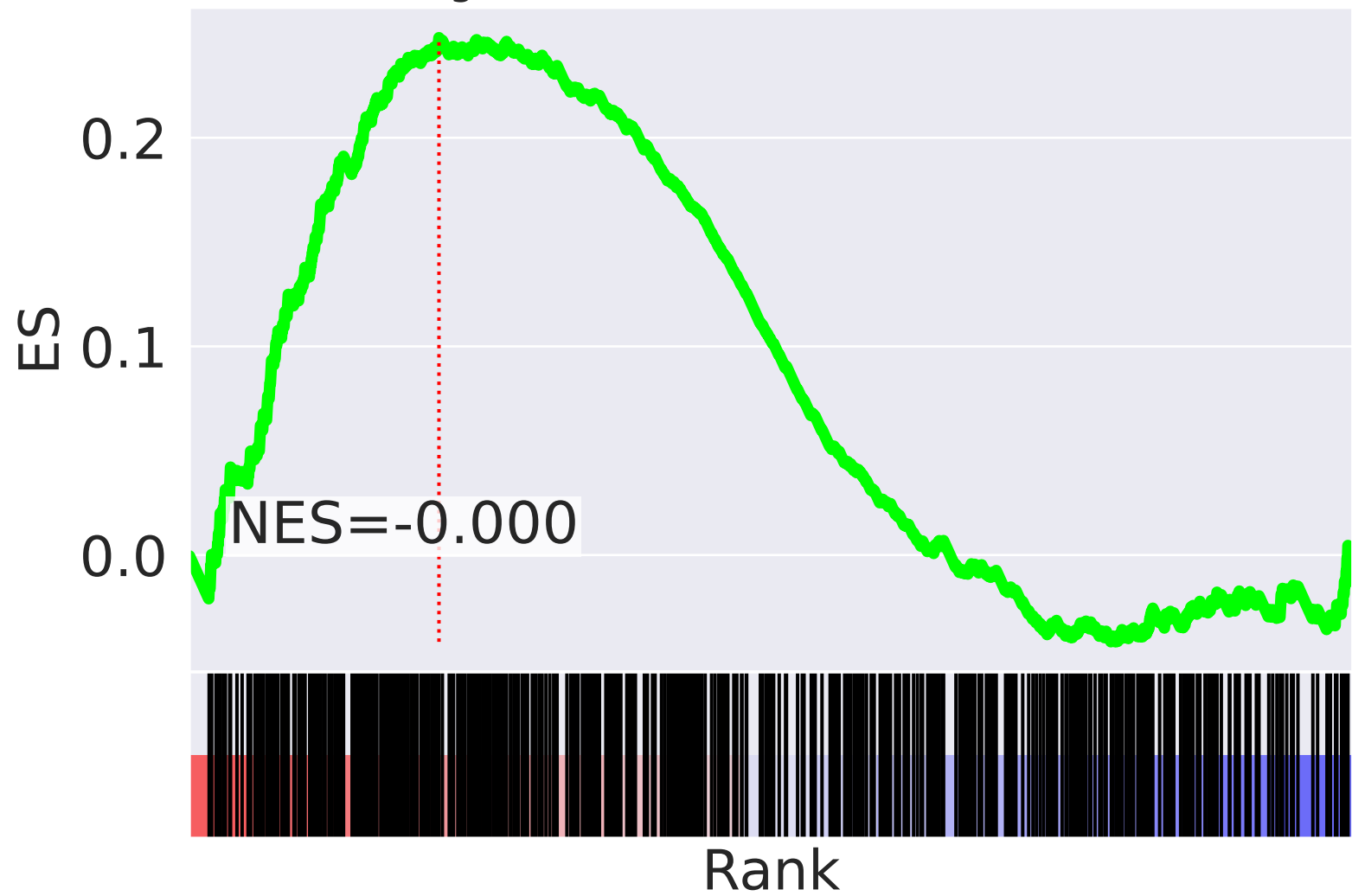
NES		SET
5.166		Host Interactions Of HIV Factors R-HSA-162909
4.781		HIV Infection R-HSA-162906
4.587		mRNA Splicing - Major Pathway R-HSA-72163
4.585		Antigen processing-Cross Presentation R-HSA-1236975
4.547		mRNA Splicing R-HSA-72172
4.533		PTEN Regulation R-HSA-6807070
4.437		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
4.437		Disorders Of Transmembrane Transporters R-HSA-5619115
4.415		M Phase R-HSA-68886
4.356		ER-Phagosome Pathway R-HSA-1236974
4.237		p53-Dependent G1 DNA Damage Response R-HSA-69563
4.235		G1/S DNA Damage Checkpoints R-HSA-69615
4.233		SCF(Skp2)-mediated Degradation Of P27/P21 R-HSA-187577
4.157		Stabilization Of P53 R-HSA-69541
4.157		Class I MHC Mediated Antigen Processing And Presentation R-HSA-983169

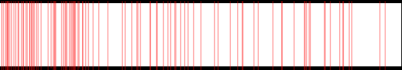
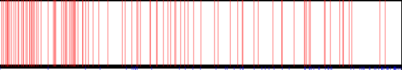
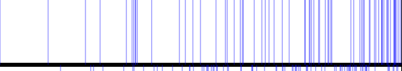
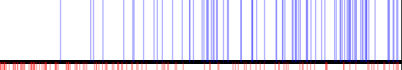
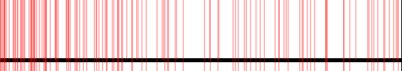
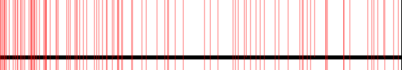
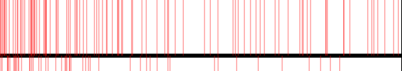
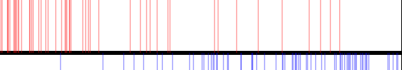
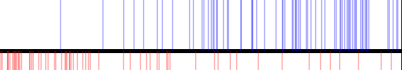
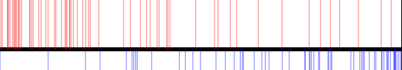
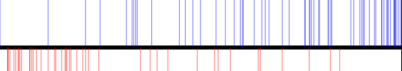
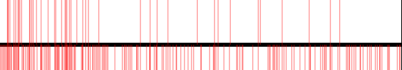
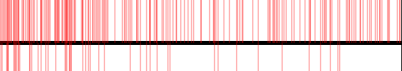
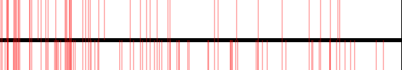

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=61$

Signal Transduction R-HSA-162582



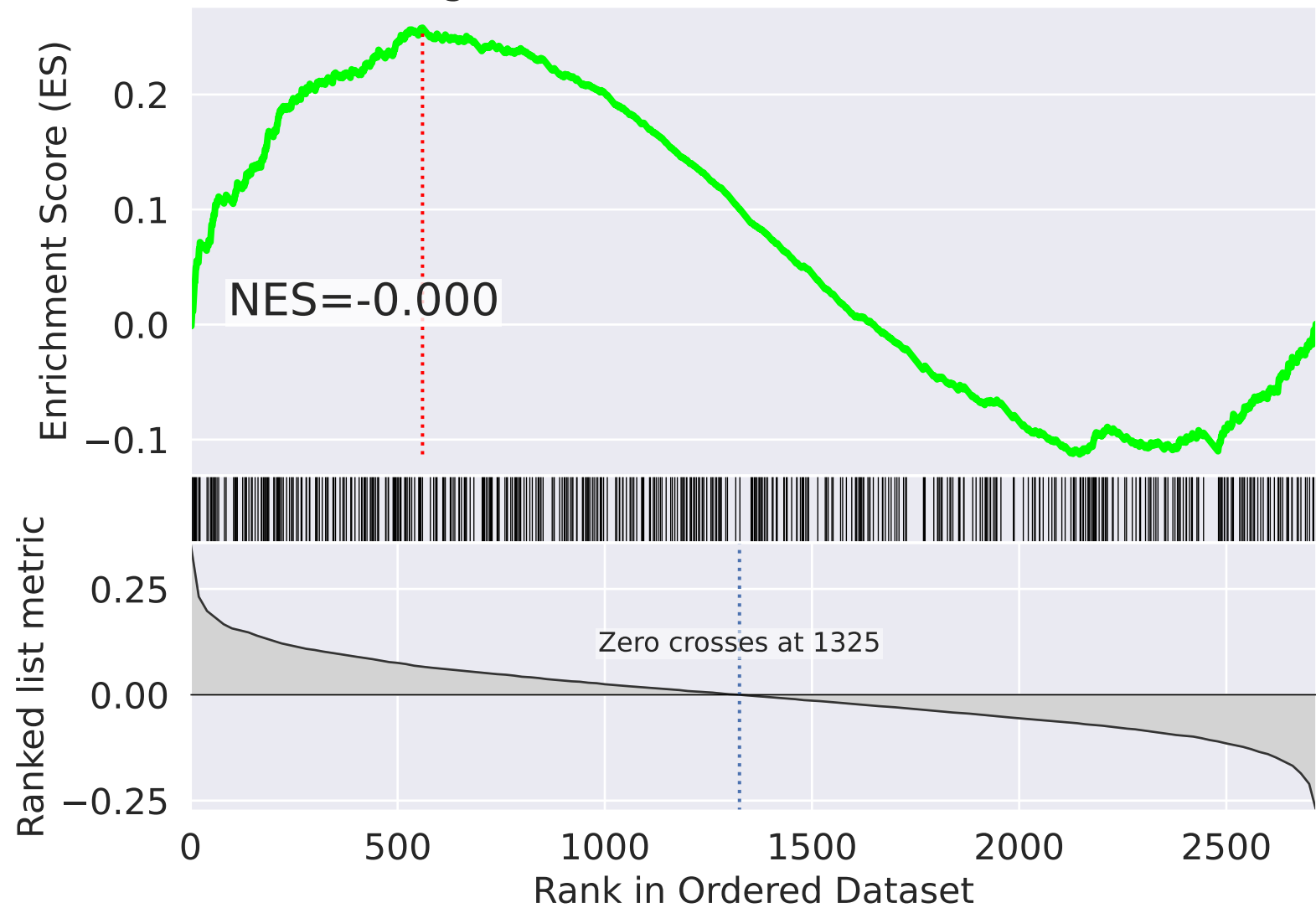
Signal Transduction R-HSA-162582



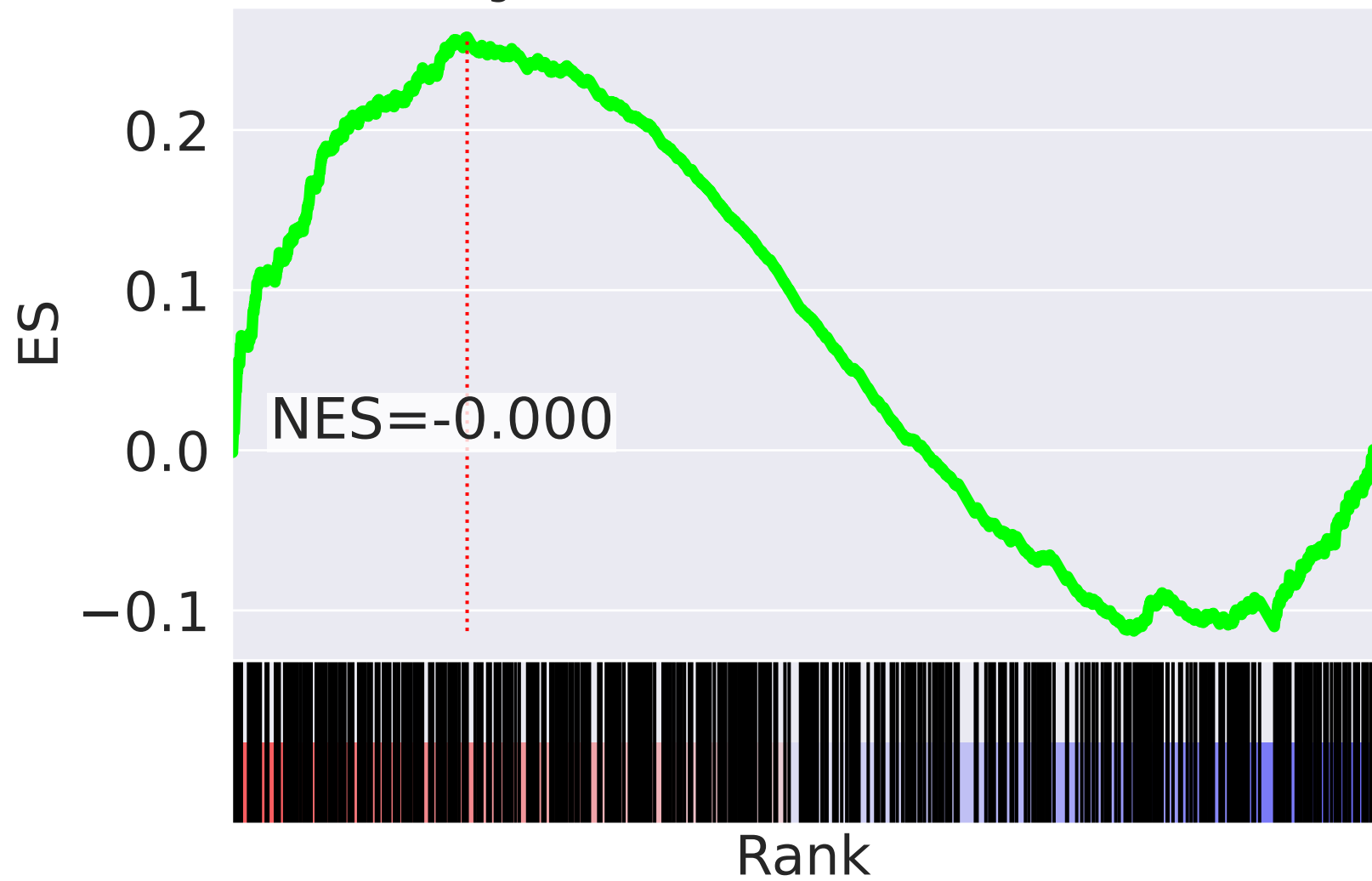
NES		SET
5.519		Mitotic G2-G2/M Phases R-HSA-453274
5.374		G2/M Transition R-HSA-69275
-5.241		rRNA Processing R-HSA-72312
-5.222		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
5.202		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
5.201		mRNA Splicing R-HSA-72172
5.195		mRNA Splicing - Major Pathway R-HSA-72163
5.058		CDK-mediated Phosphorylation And Removal Of Cdc6 R-HSA-69017
-4.987		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
4.987		Switching Of Origins To A Post-Replicative State R-HSA-69052
-4.943		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
4.911		SCF(Skp2)-mediated Degradation Of P27/P21 R-HSA-187577
4.842		M Phase R-HSA-68886
4.817		APC/C:Cdh1 Mediated Degradation Of Cdc20 And APC/C:Cdh1 Targets In Late Mitosis/Early G1 R-HSA-174178
4.797		Antigen Processing: Ubiquitination And Proteasome Degradation R-HSA-983168


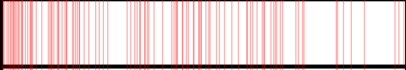
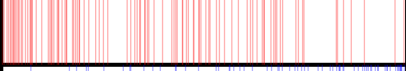
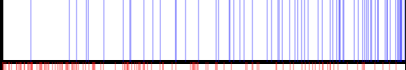
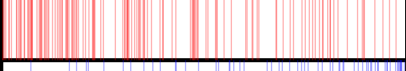
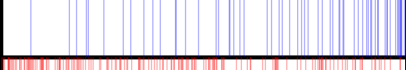
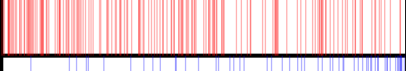
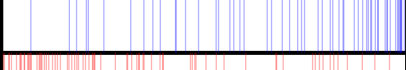
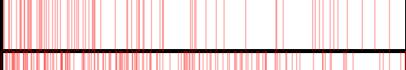
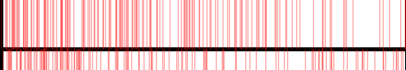
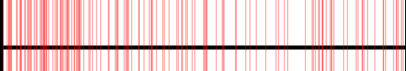
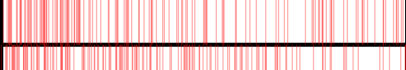
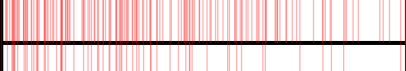
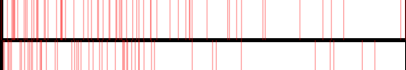

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=62$

Signal Transduction R-HSA-162582



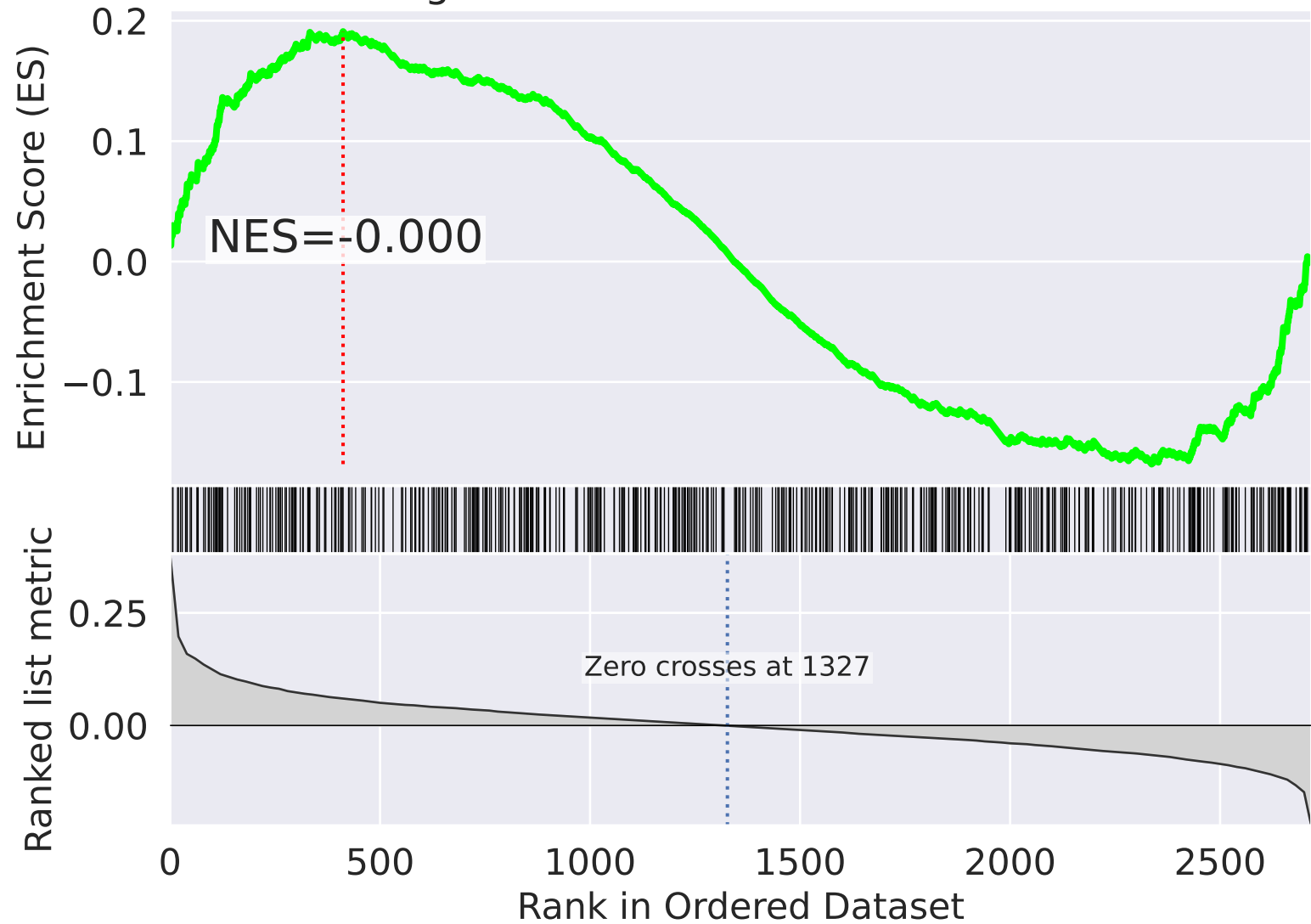
Signal Transduction R-HSA-162582



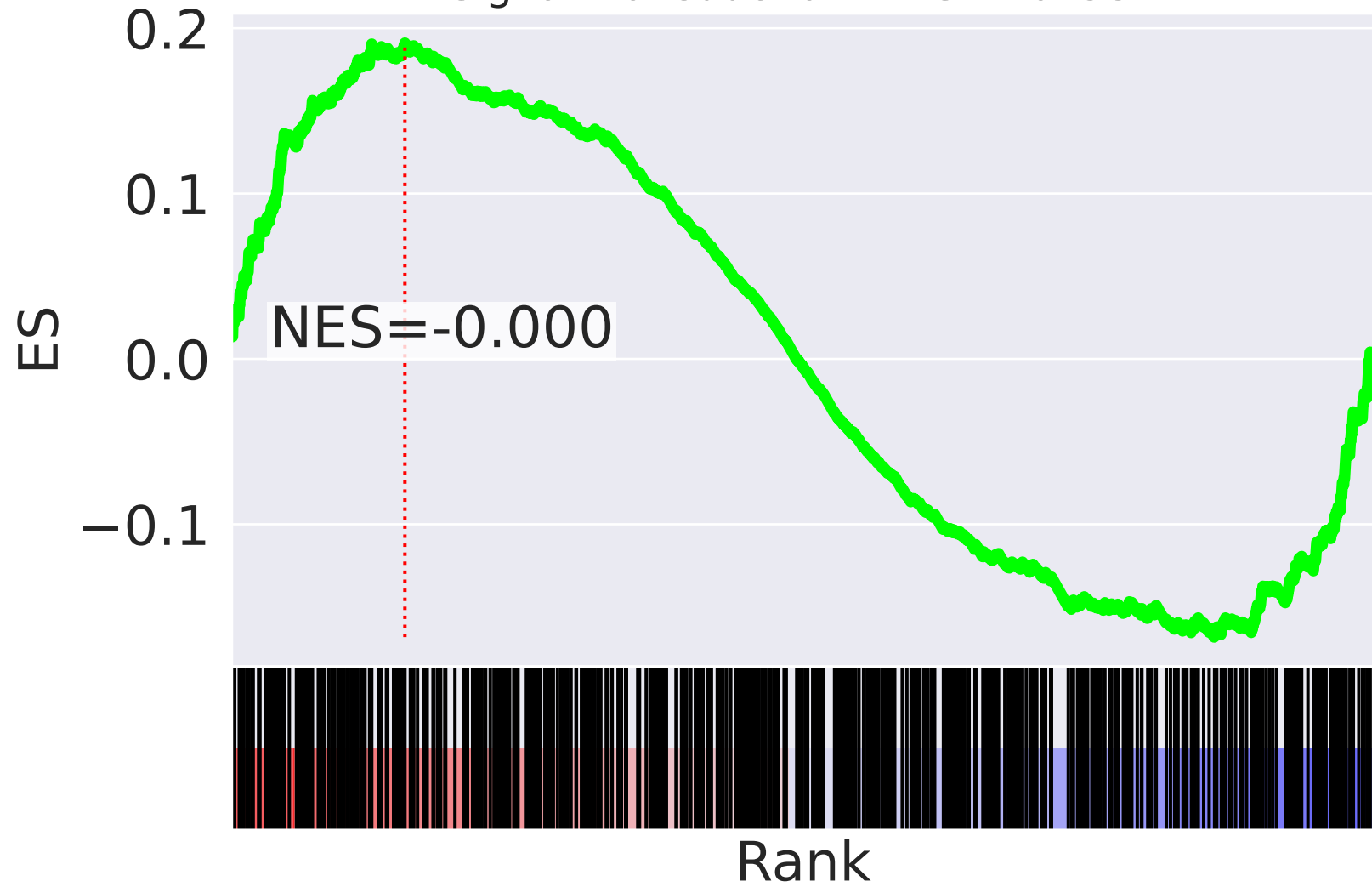
NES		SET
5.780		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
5.320		mRNA Splicing R-HSA-72172
5.315		mRNA Splicing - Major Pathway R-HSA-72163
-5.061		rRNA Processing R-HSA-72312
4.936		HIV Infection R-HSA-162906
-4.878		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
4.874		Cytokine Signaling In Immune System R-HSA-1280215
-4.851		Major Pathway Of rRNA Processing In Nucleolus And Cytosol R-HSA-6791226
4.477		Host Interactions Of HIV Factors R-HSA-162909
4.358		Membrane Trafficking R-HSA-199991
4.312		Mitotic Metaphase And Anaphase R-HSA-2555396
4.296		Mitotic Anaphase R-HSA-68882
4.283		Vesicle-mediated Transport R-HSA-5653656
4.189		Intra-Golgi And Retrograde Golgi-to-ER Traffic R-HSA-6811442
4.183		TCR Signaling R-HSA-202403

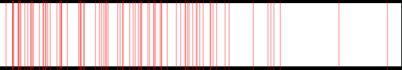
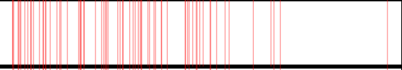
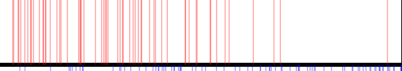
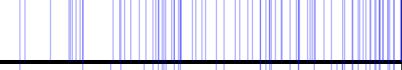
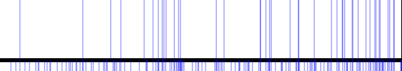
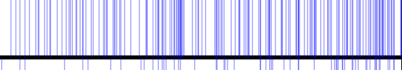
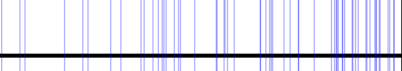
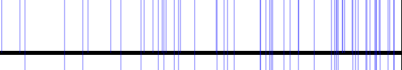
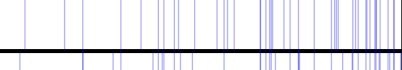
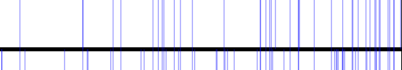
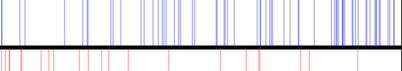

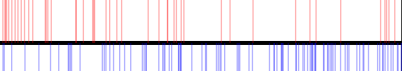
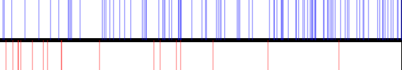

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=63$

Signal Transduction R-HSA-162582



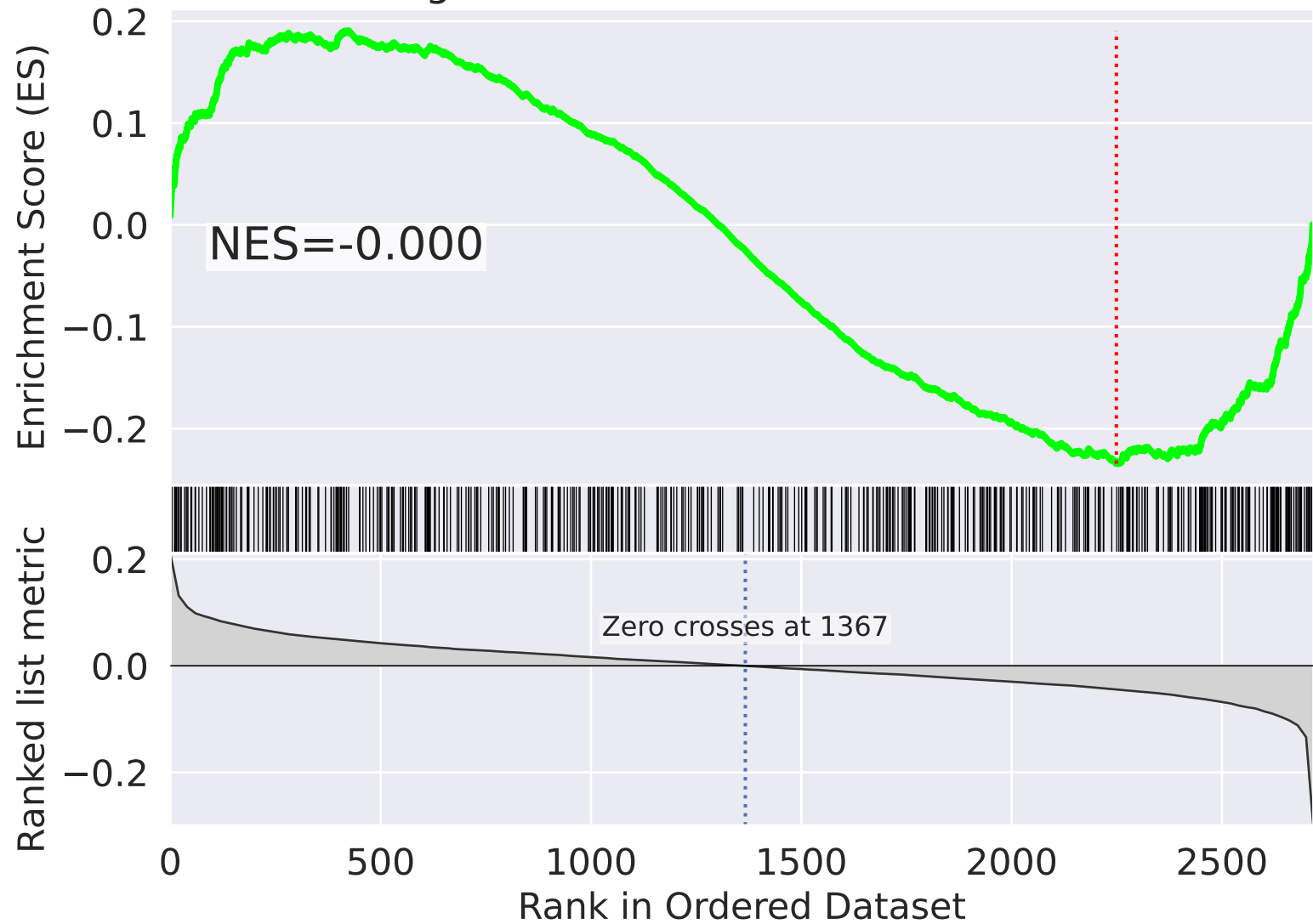
Signal Transduction R-HSA-162582



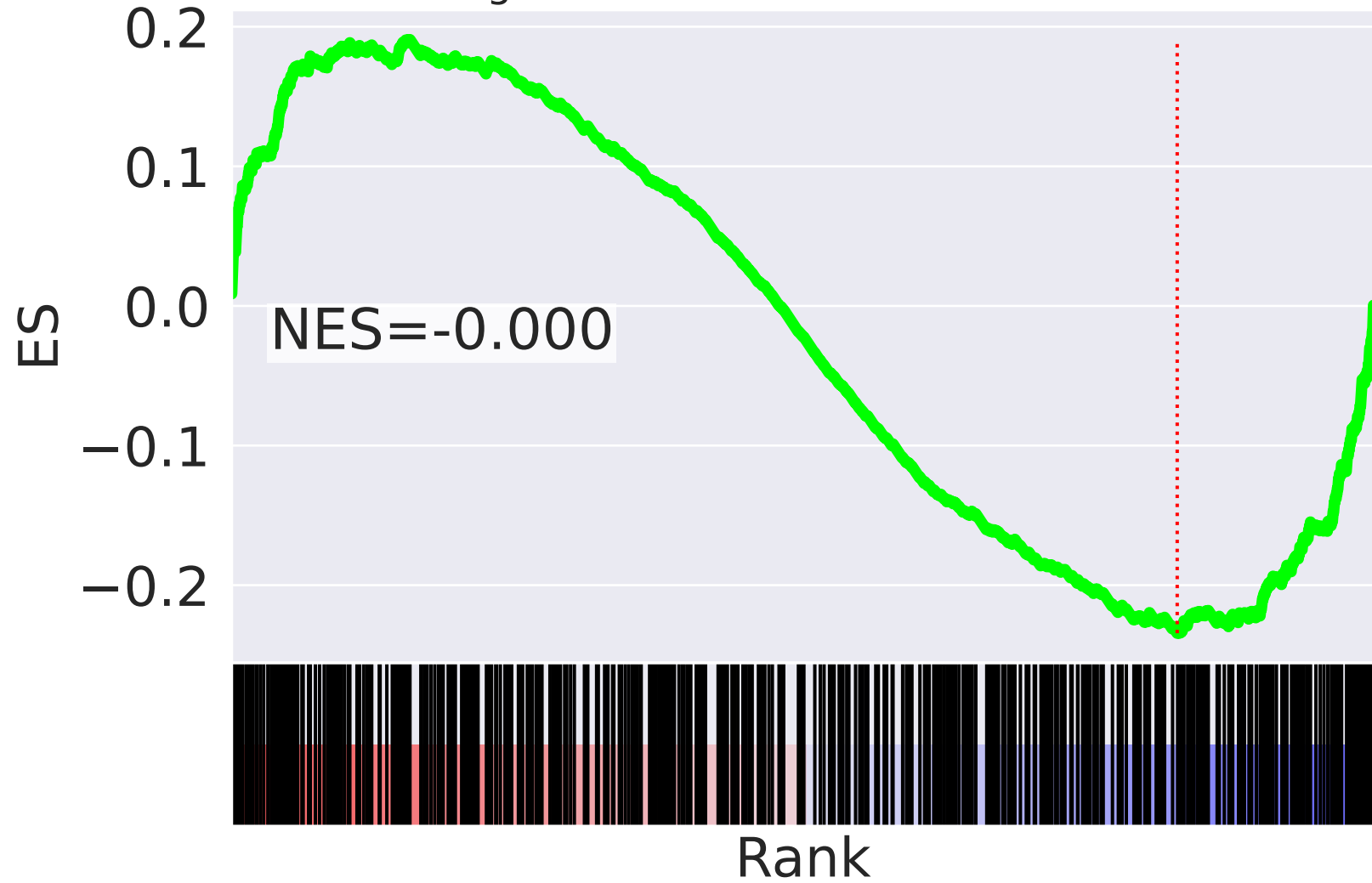
NES		SET
4.922		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
4.498		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
4.165		Respiratory Electron Transport R-HSA-611105
-3.897		G2/M Checkpoints R-HSA-69481
-3.863		Processing Of DNA Double-Strand Break Ends R-HSA-5693607
-3.832		Cell Cycle Checkpoints R-HSA-69620
-3.655		Homology Directed Repair R-HSA-5693538
-3.639		HDR Thru Homologous Recombination (HRR) Or Single Strand Annealing (SSA) R-HSA-5693567
-3.596		HDR Thru Homologous Recombination (HRR) R-HSA-5685942
-3.485		G2/M DNA Damage Checkpoint R-HSA-69473
-3.390		DNA Double-Strand Break Repair R-HSA-5693532
3.325		Metabolism Of Nucleotides R-HSA-15869
3.215		Transcriptional Regulation Of White Adipocyte Differentiation R-HSA-381340
-3.212		Antigen Processing: Ubiquitination And Proteasome Degradation R-HSA-983168
3.180		Pyruvate Metabolism And Citric Acid (TCA) Cycle R-HSA-71406


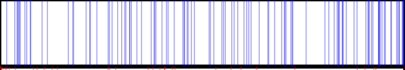
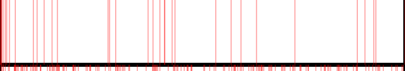

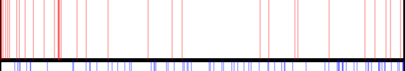
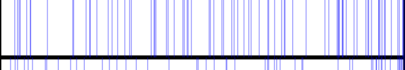
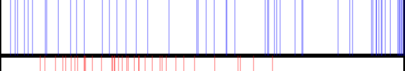
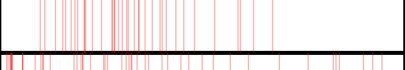
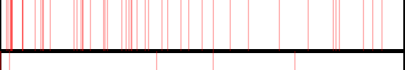

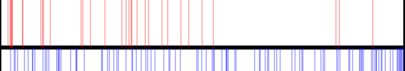
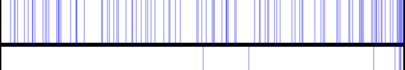



The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=64$

Signal Transduction R-HSA-162582



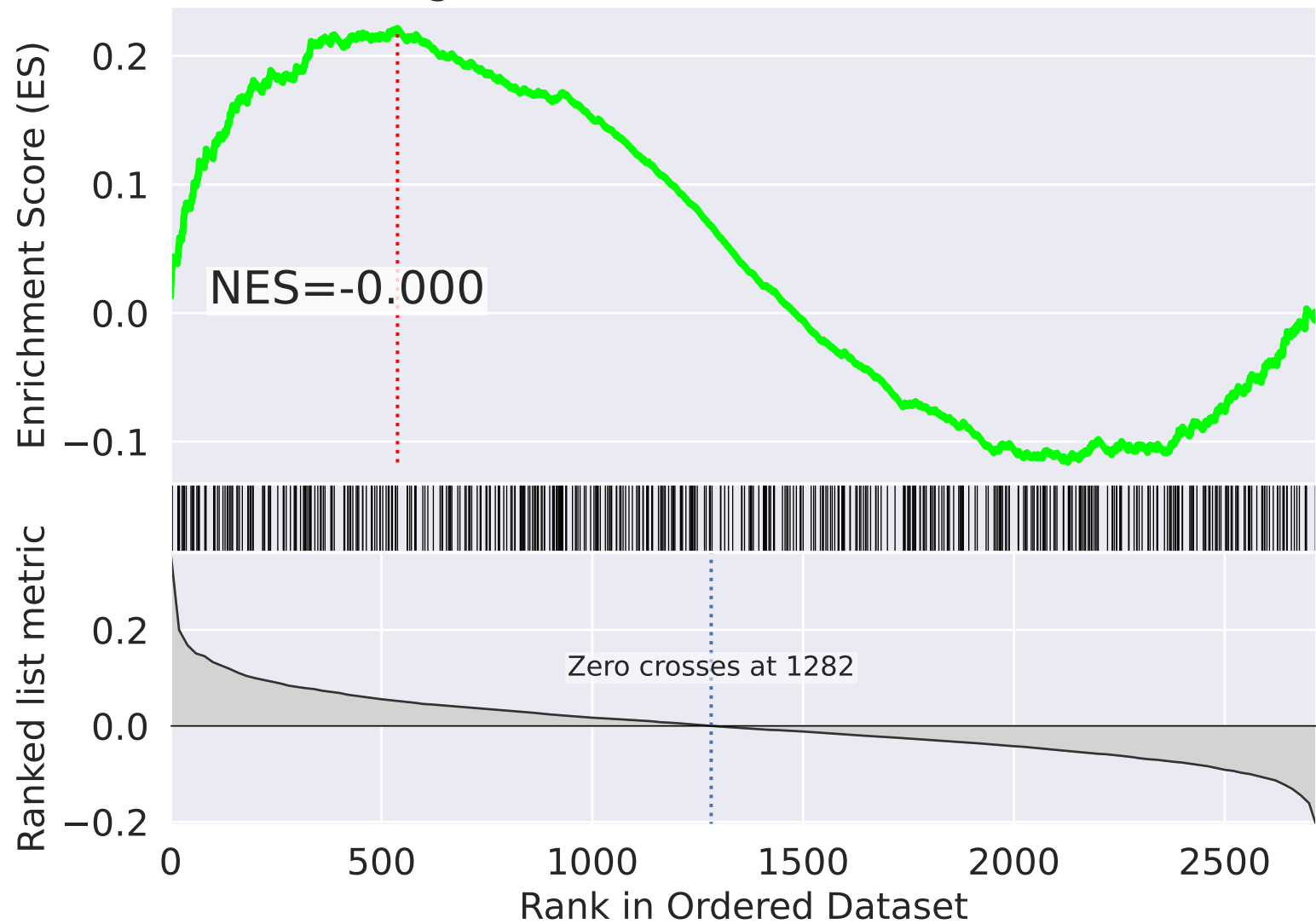
Signal Transduction R-HSA-162582



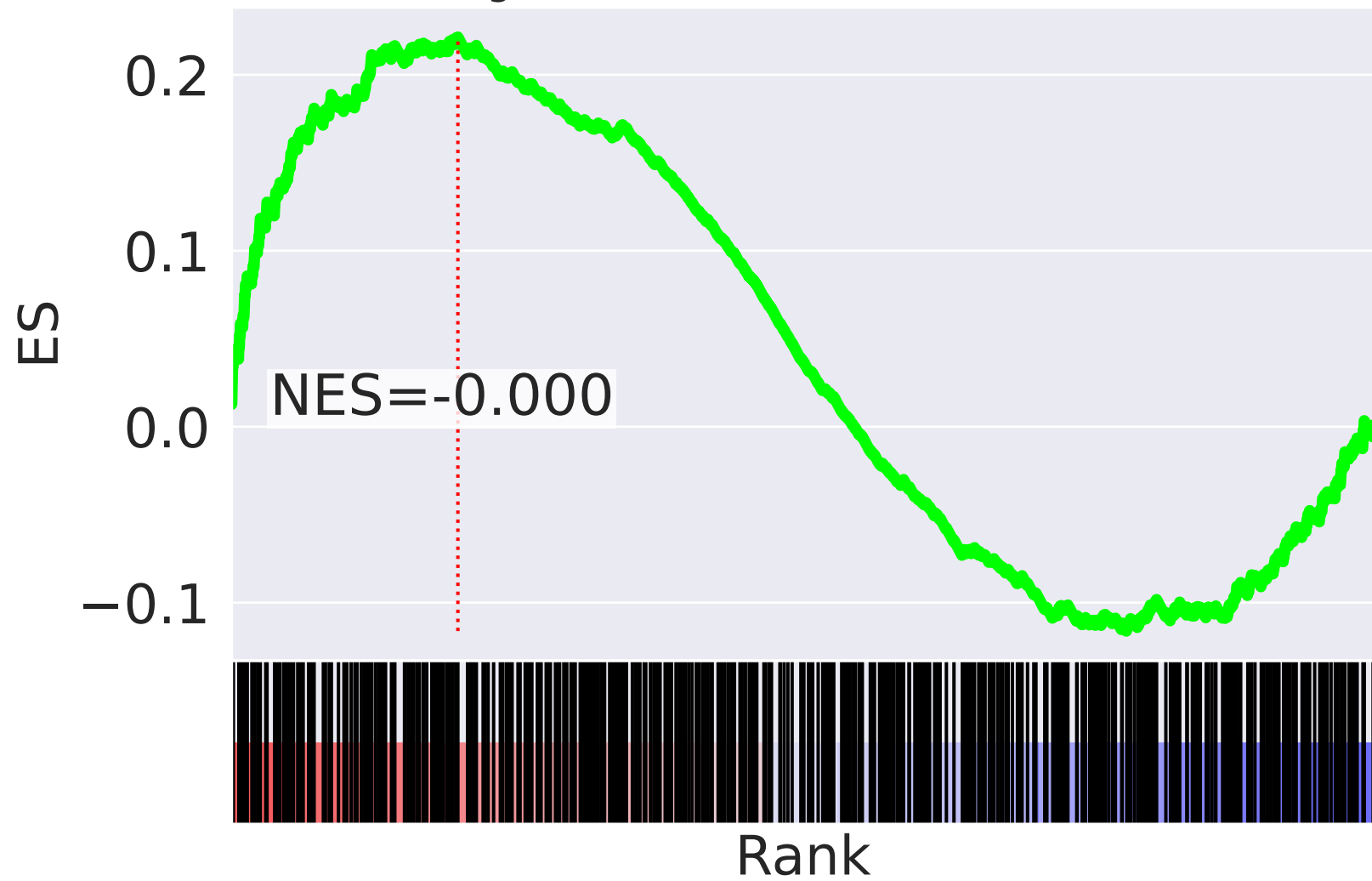
NES		SET
4.004		VEGFA-VEGFR2 Pathway R-HSA-4420097
-3.612		Deubiquitination R-HSA-5688426
3.471		Signaling By VEGF R-HSA-194138
3.281		Adaptive Immune System R-HSA-1280218
3.269		Leishmania Infection R-HSA-9658195
-3.229		Ub-specific Processing Proteases R-HSA-5689880
-3.191		HATs Acetylate Histones R-HSA-3214847
3.152		Complex I Biogenesis R-HSA-6799198
3.116		Mitotic Prophase R-HSA-68875
3.078		p130Cas Linkage To MAPK Signaling For Integrins R-HSA-372708
3.046		Nuclear Envelope Breakdown R-HSA-2980766
-3.044		Chromatin Modifying Enzymes R-HSA-3247509
-3.007		TP53 Regulates Transcription Of Genes Involved In Cytochrome C Release R-HSA-6803204
-2.906		Signaling By ERBB2 In Cancer R-HSA-1227990
2.881		PTK6 Regulates RHO GTPases, RAS GTPase And MAP Kinases R-HSA-8849471

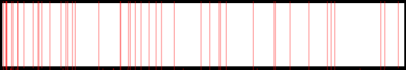
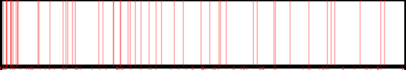
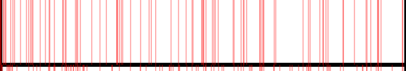
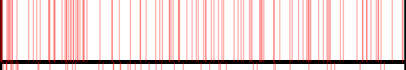
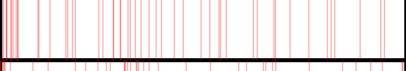
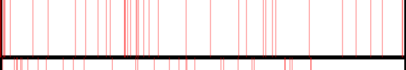
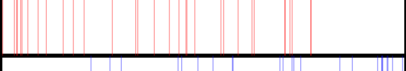

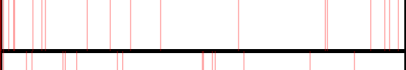
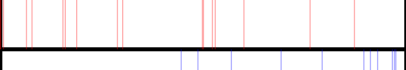

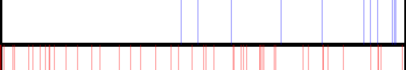
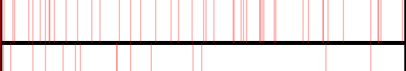


The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=65$

Signal Transduction R-HSA-162582



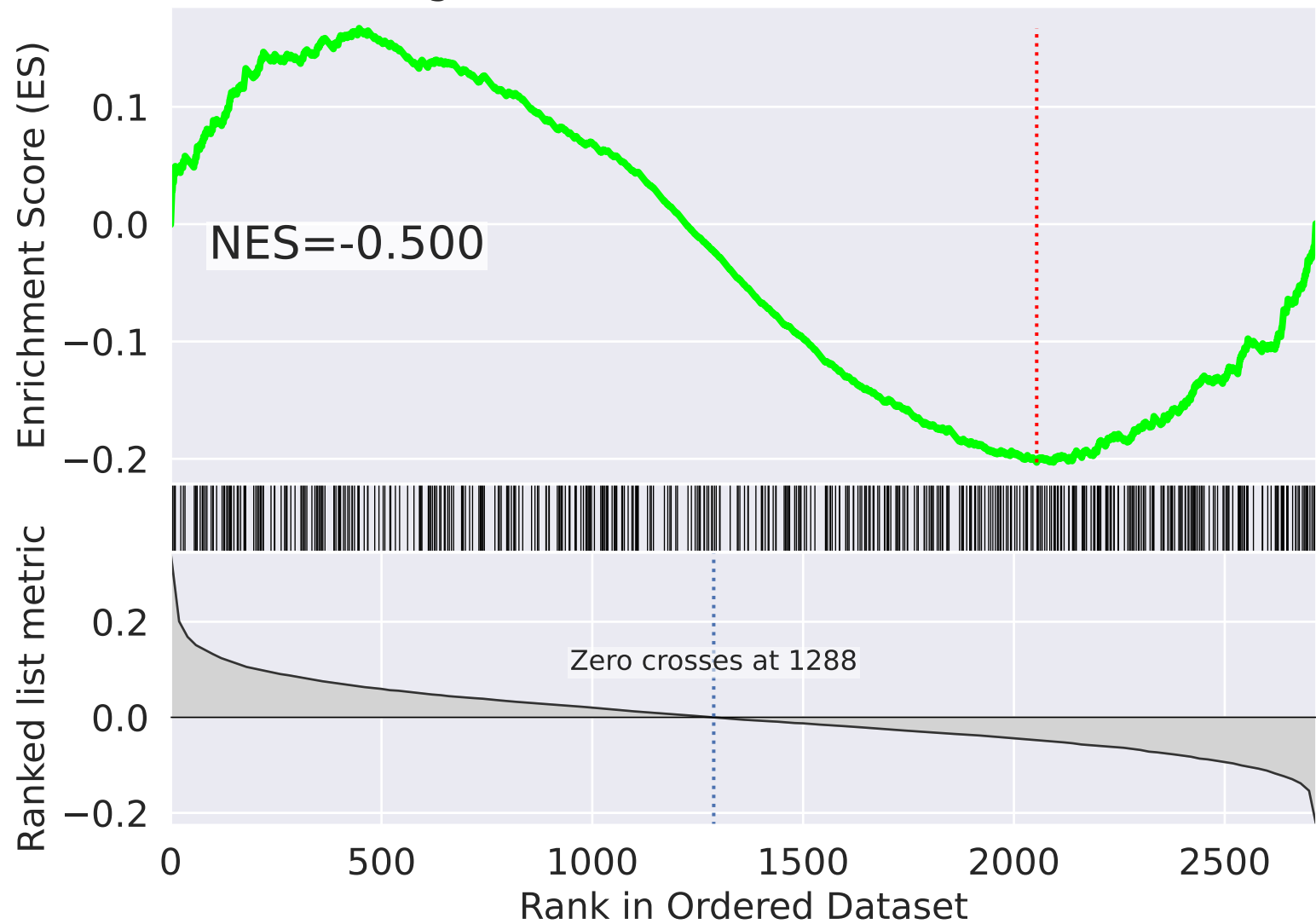
Signal Transduction R-HSA-162582



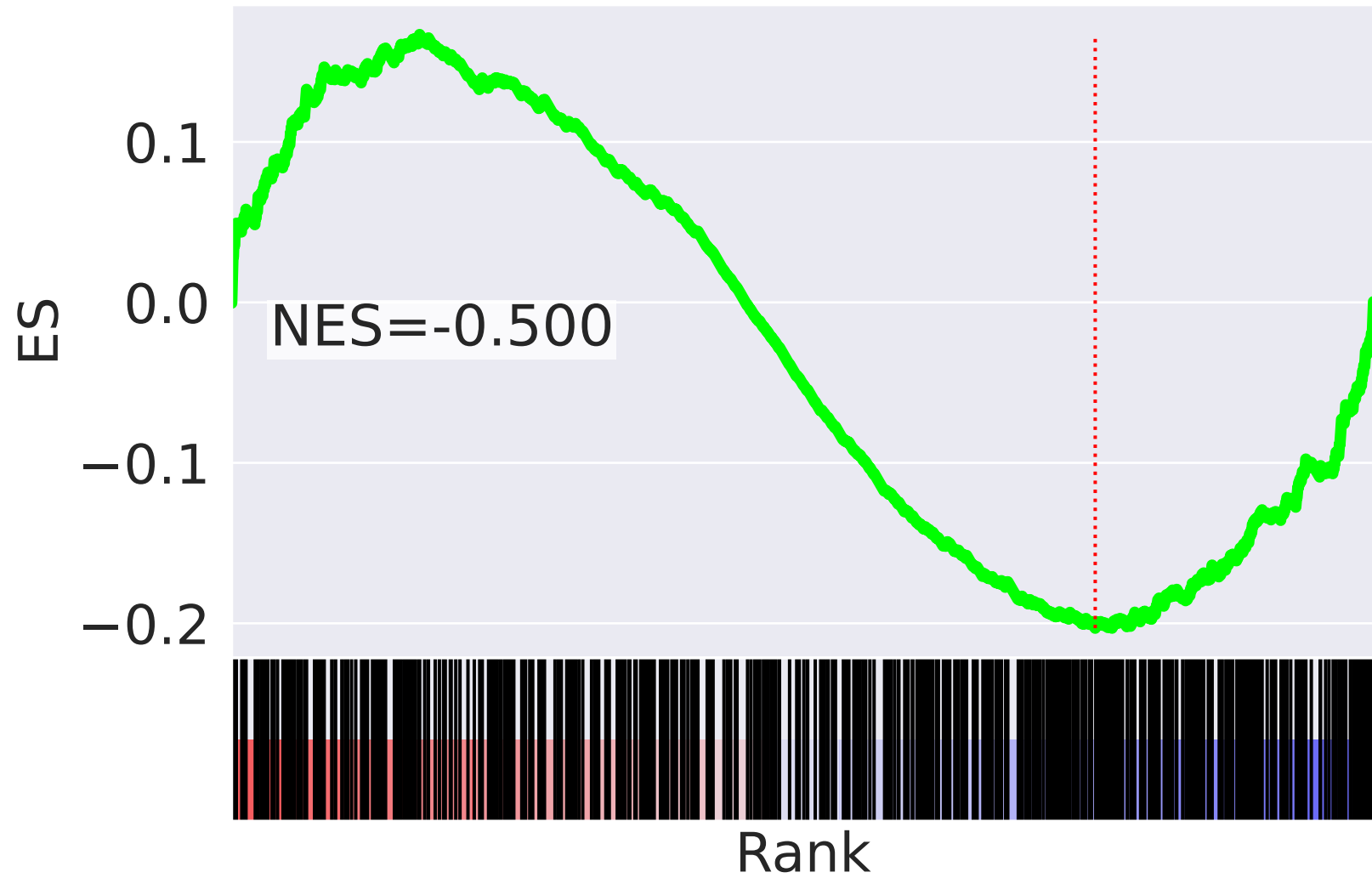
NES		SET
3.523		Transcriptional Regulation Of White Adipocyte Differentiation R-HSA-381340
3.389		Regulation Of Lipid Metabolism By PPARalpha R-HSA-400206
3.298		Transcriptional Regulation By RUNX1 R-HSA-8878171
3.132		Transport Of Small Molecules R-HSA-382551
3.085		PPARA Activates Gene Expression R-HSA-1989781
3.082		Estrogen-dependent Gene Expression R-HSA-9018519
3.012		Amino Acids Regulate mTORC1 R-HSA-9639288
-2.981		Cell-Cell Communication R-HSA-1500931
2.942		Transcriptional Regulation Of Granulopoiesis R-HSA-9616222
2.905		RUNX1 Interacts With Co-Factors Whose Precise Effect On RUNX1 Targets Is Not Known R-HSA-8939243
-2.868		Signaling By RAF1 Mutants R-HSA-9656223
-2.868		Signaling By High-Kinase Activity BRAF Mutants R-HSA-6802948
2.842		RUNX1 Regulates Transcription Of Genes Involved In Differentiation Of HSCs R-HSA-8939236
2.824		RUNX1 Regulates Genes Involved In Megakaryocyte Differentiation And Platelet Function R-HSA-8936459
2.799		Metabolism Of Porphyrins R-HSA-189445

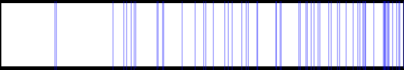
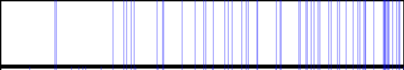
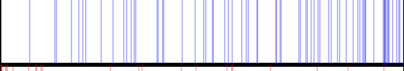
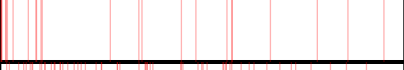
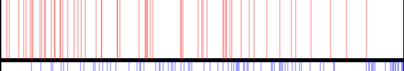
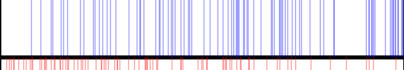
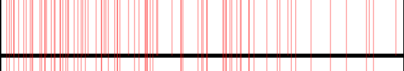
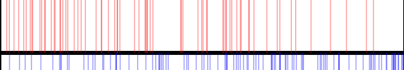
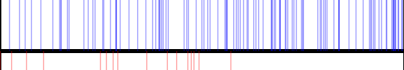
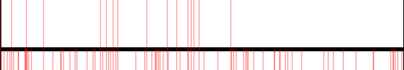
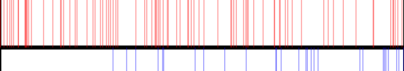

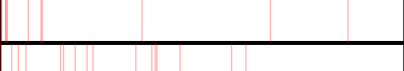
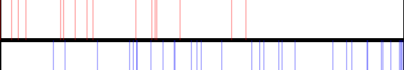

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=66$

Signal Transduction R-HSA-162582



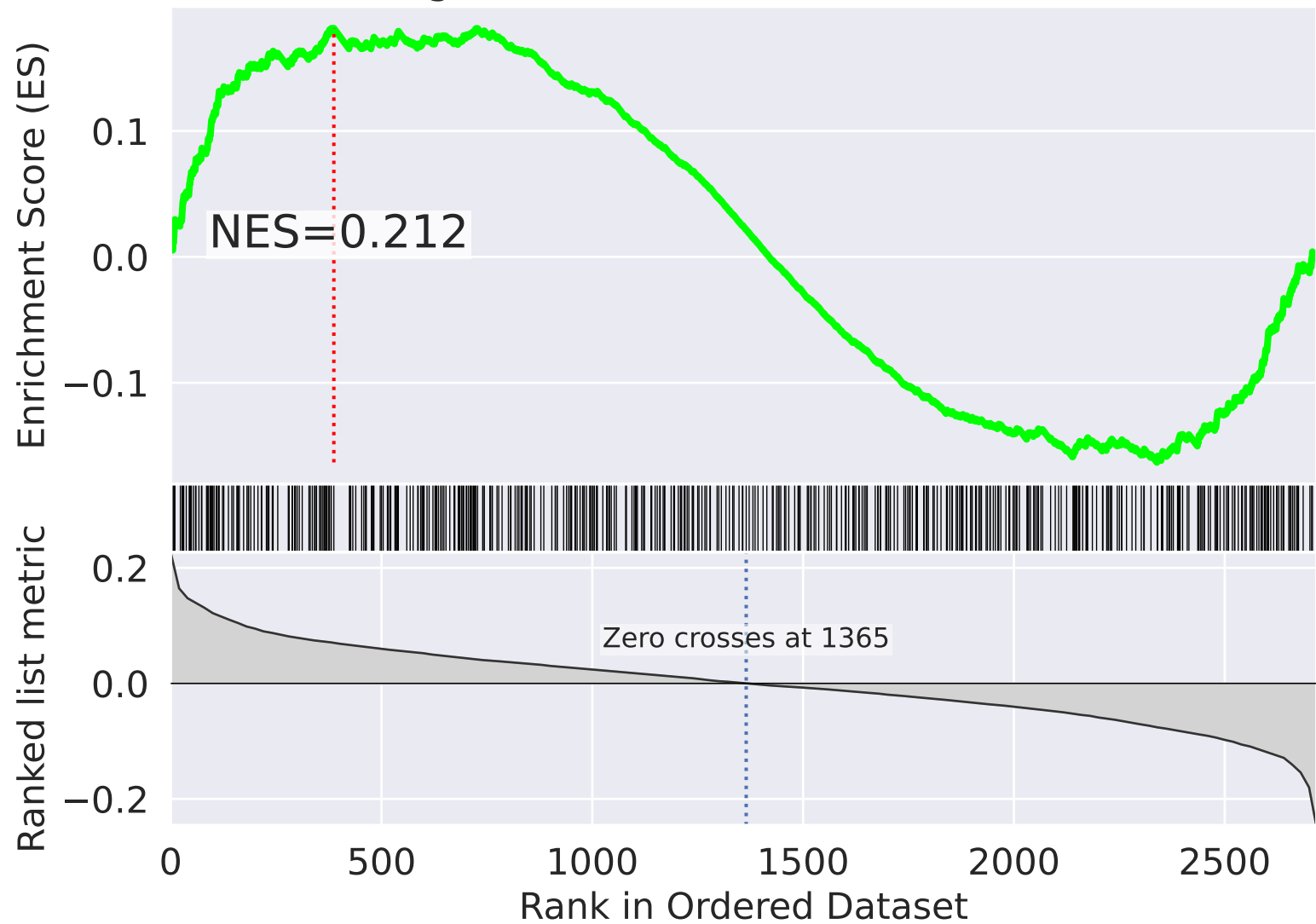
Signal Transduction R-HSA-162582



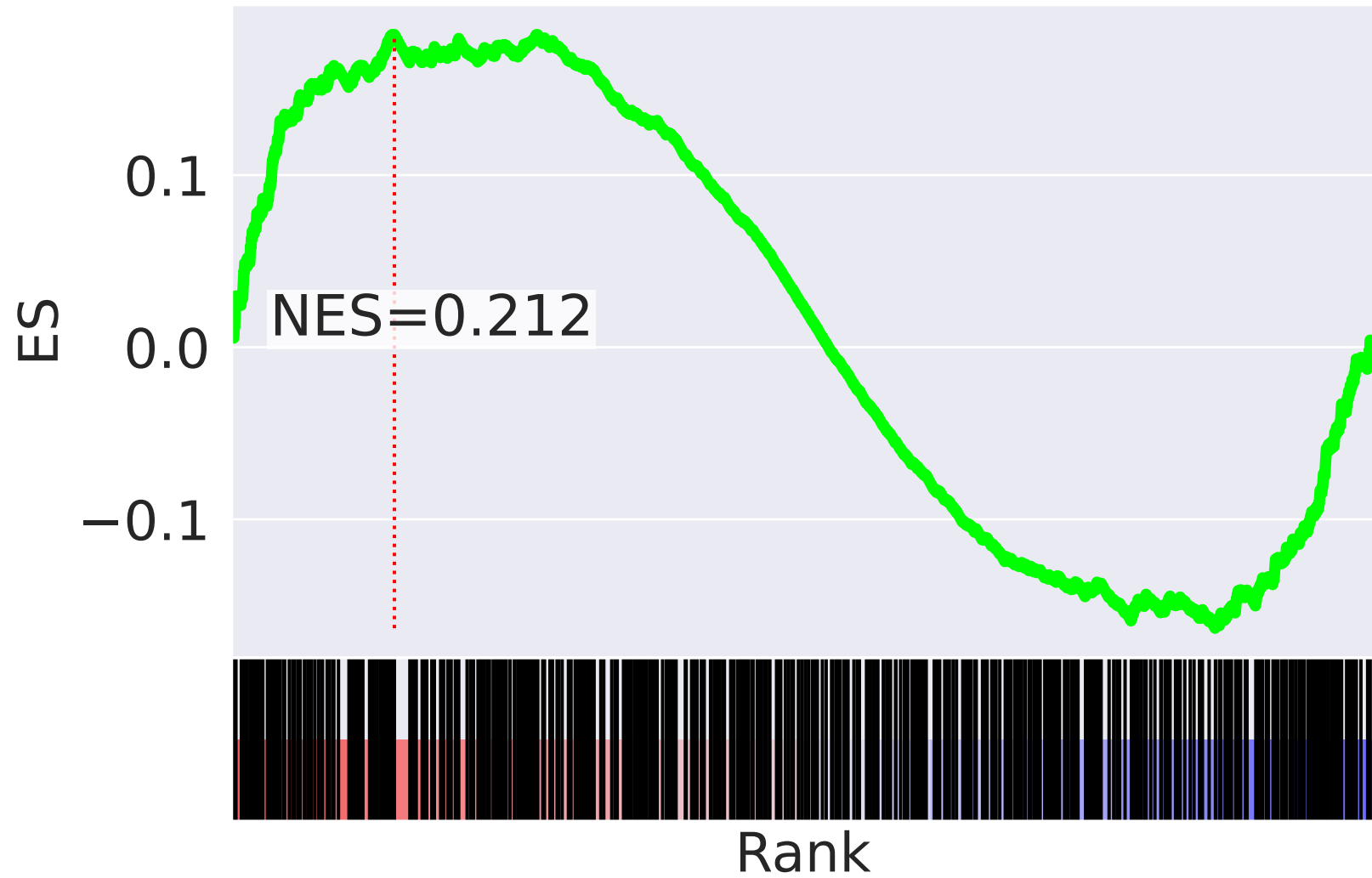
NES		SET
-4.624		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
-4.448		Major Pathway Of rRNA Processing In Nucleolus And Cytosol R-HSA-6791226
-3.983		rRNA Processing R-HSA-72312
3.966		Metabolism Of Nucleotides R-HSA-15869
3.442		Respiratory Electron Transport R-HSA-611105
-3.420		G2/M Checkpoints R-HSA-69481
3.405		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
3.290		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
-3.284		S Phase R-HSA-69242
3.243		RUNX1 Interacts With Co-Factors Whose Precise Effect On RUNX1 Targets Is Not Known R-HSA-8939243
3.240		Transcriptional Regulation By RUNX1 R-HSA-8878171
-3.232		rRNA Modification In Nucleus And Cytosol R-HSA-6790901
3.198		Nucleotide Biosynthesis R-HSA-8956320
3.134		RUNX1 Regulates Genes Involved In Megakaryocyte Differentiation And Platelet Function R-HSA-8936459
-3.125		Recruitment Of NuMA To Mitotic Centrosomes R-HSA-380320

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=67$

Signal Transduction R-HSA-162582



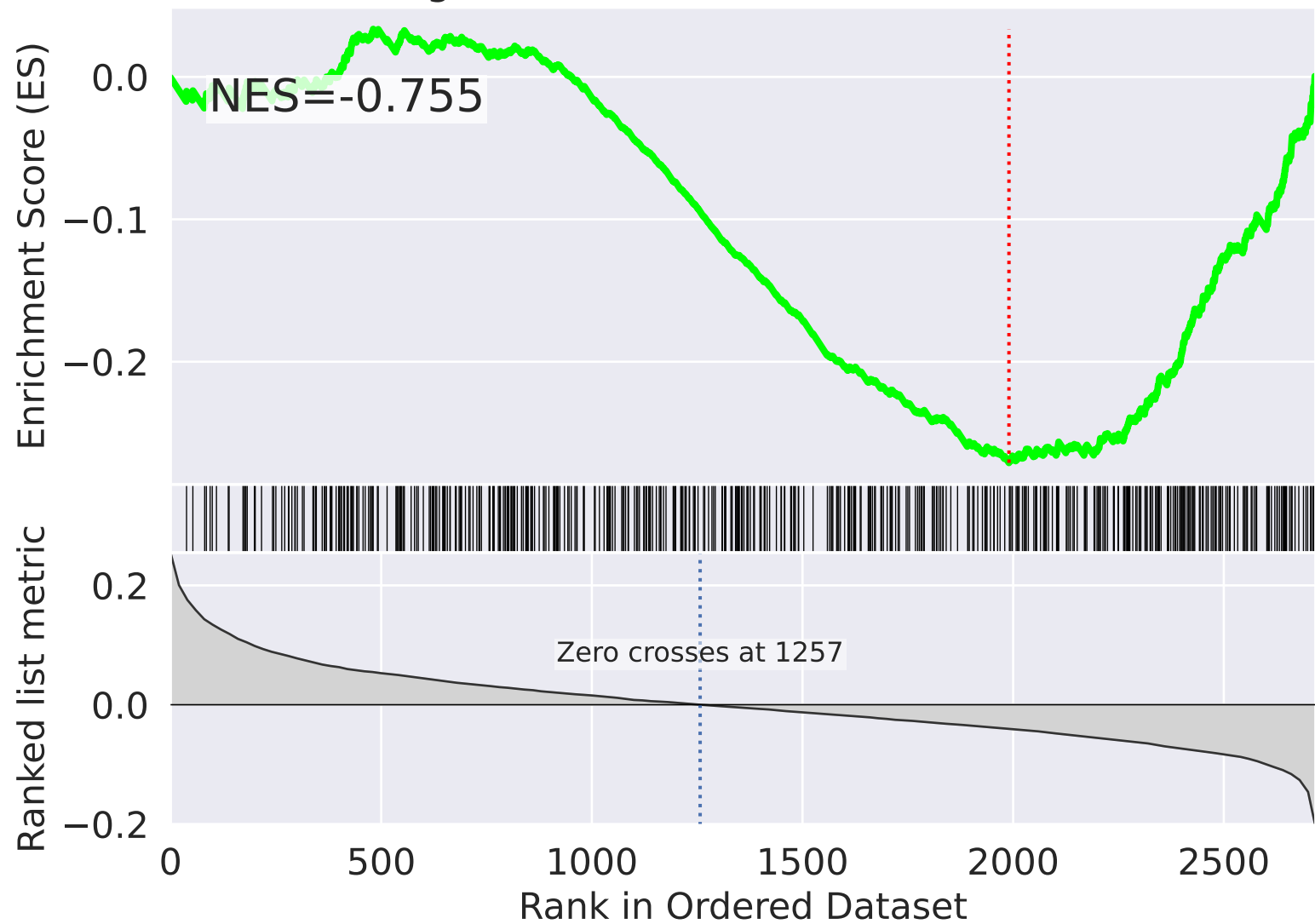
Signal Transduction R-HSA-162582



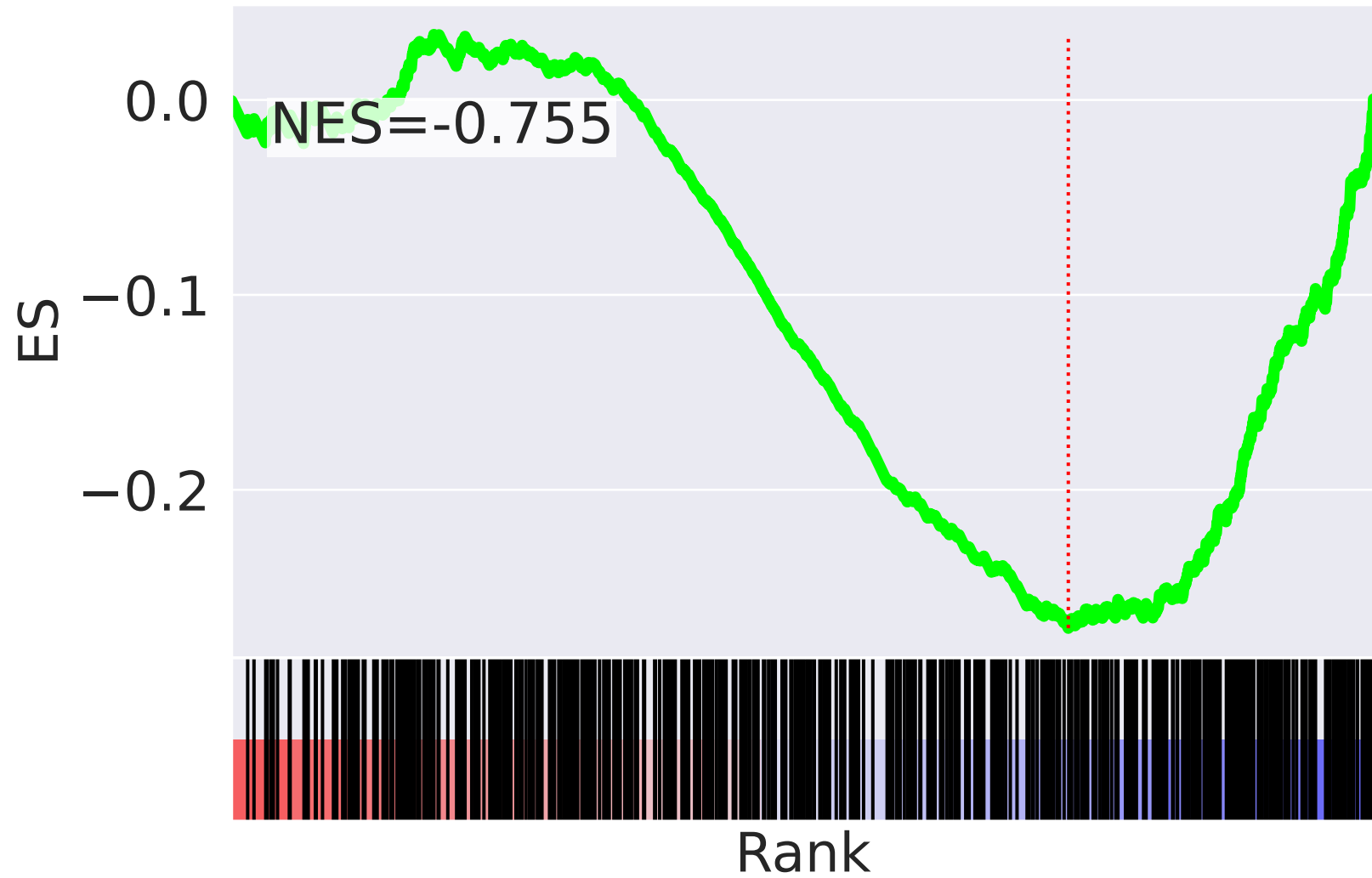
NES		SET
-4.563		rRNA Processing R-HSA-72312
4.521		mRNA Splicing R-HSA-72172
4.469		mRNA Splicing - Major Pathway R-HSA-72163
4.263		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
-4.262		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
-4.017		Major Pathway Of rRNA Processing In Nucleolus And Cytosol R-HSA-6791226
-3.995		Chromatin Modifying Enzymes R-HSA-3247509
3.947		RNA Polymerase II Transcribes snRNA Genes R-HSA-6807505
3.699		Switching Of Origins To A Post-Replicative State R-HSA-69052
-3.697		Mitochondrial Biogenesis R-HSA-1592230
3.661		APC/C:Cdh1 Mediated Degradation Of Cdc20 And APC/C:Cdh1 Targets In Late Mitosis/Early G1 R-HSA-174178
3.555		Synthesis Of DNA R-HSA-69239
3.541		CDK-mediated Phosphorylation And Removal Of Cdc6 R-HSA-69017
3.494		DNA Replication Pre-Initiation R-HSA-69002
3.472		APC/C:Cdc20 Mediated Degradation Of Securin R-HSA-174154

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=68$

Signal Transduction R-HSA-162582



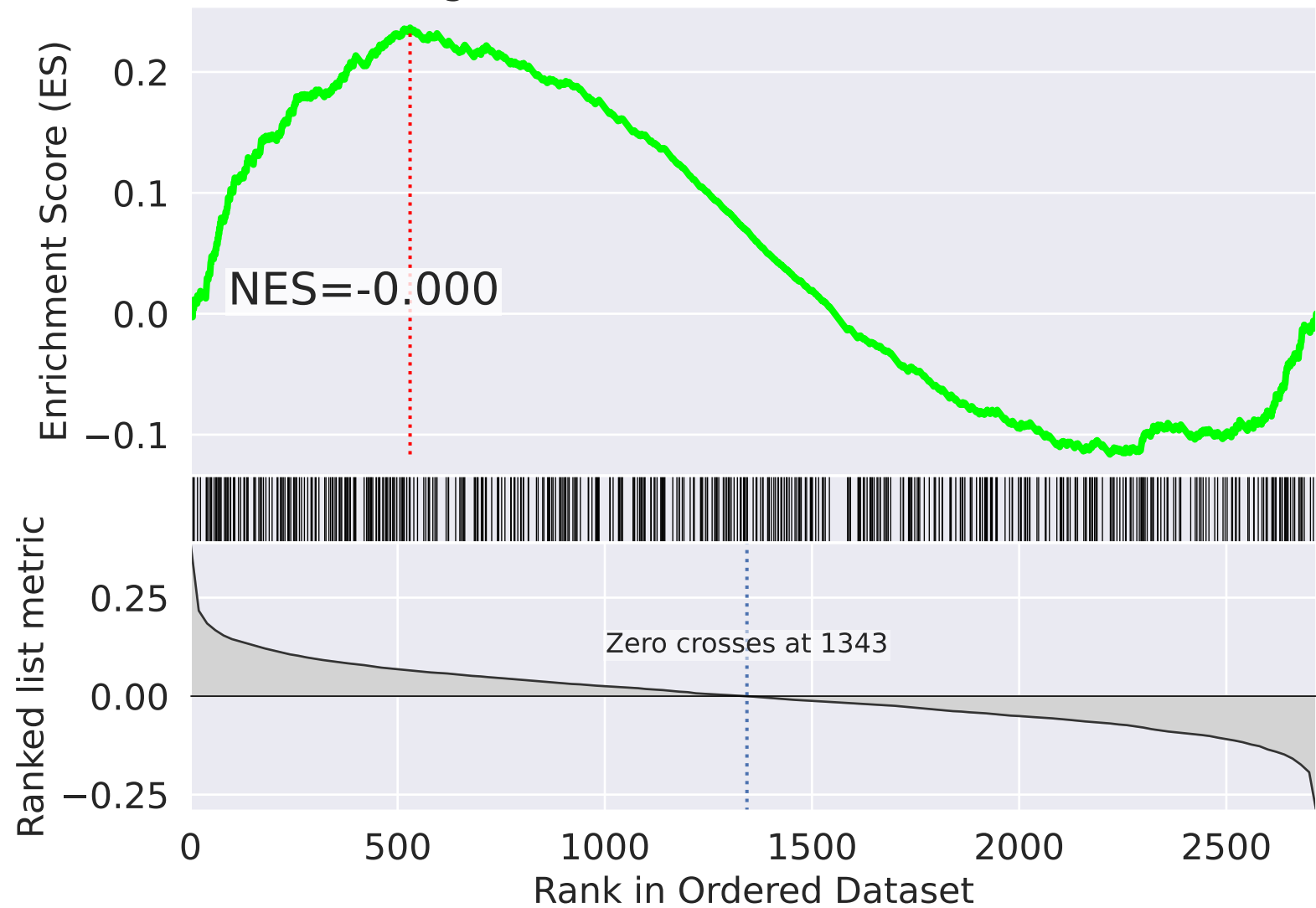
Signal Transduction R-HSA-162582



NES		SET
7.458		Citric Acid (TCA) Cycle And Respiratory Electron Transport R-HSA-1428517
7.400		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
7.350		Respiratory Electron Transport R-HSA-611105
6.346		Complex I Biogenesis R-HSA-6799198
-4.164		Mitotic G1 Phase And G1/S Transition R-HSA-453279
4.095		Mitochondrial tRNA Aminoacylation R-HSA-379726
-4.033		TCR Signaling R-HSA-202403
4.002		tRNA Aminoacylation R-HSA-379724
-3.983		FCERI Mediated NF-kB Activation R-HSA-2871837
-3.952		Signaling By Hedgehog R-HSA-5358351
-3.947		Transcriptional Regulation By RUNX2 R-HSA-8878166
-3.946		Downstream TCR Signaling R-HSA-202424
-3.888		CLEC7A (Dectin-1) Signaling R-HSA-5607764
3.859		Translation R-HSA-72766
-3.801		Interleukin-1 Signaling R-HSA-9020702

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=69$

Signal Transduction R-HSA-162582



Signal Transduction R-HSA-162582

ES

0.2

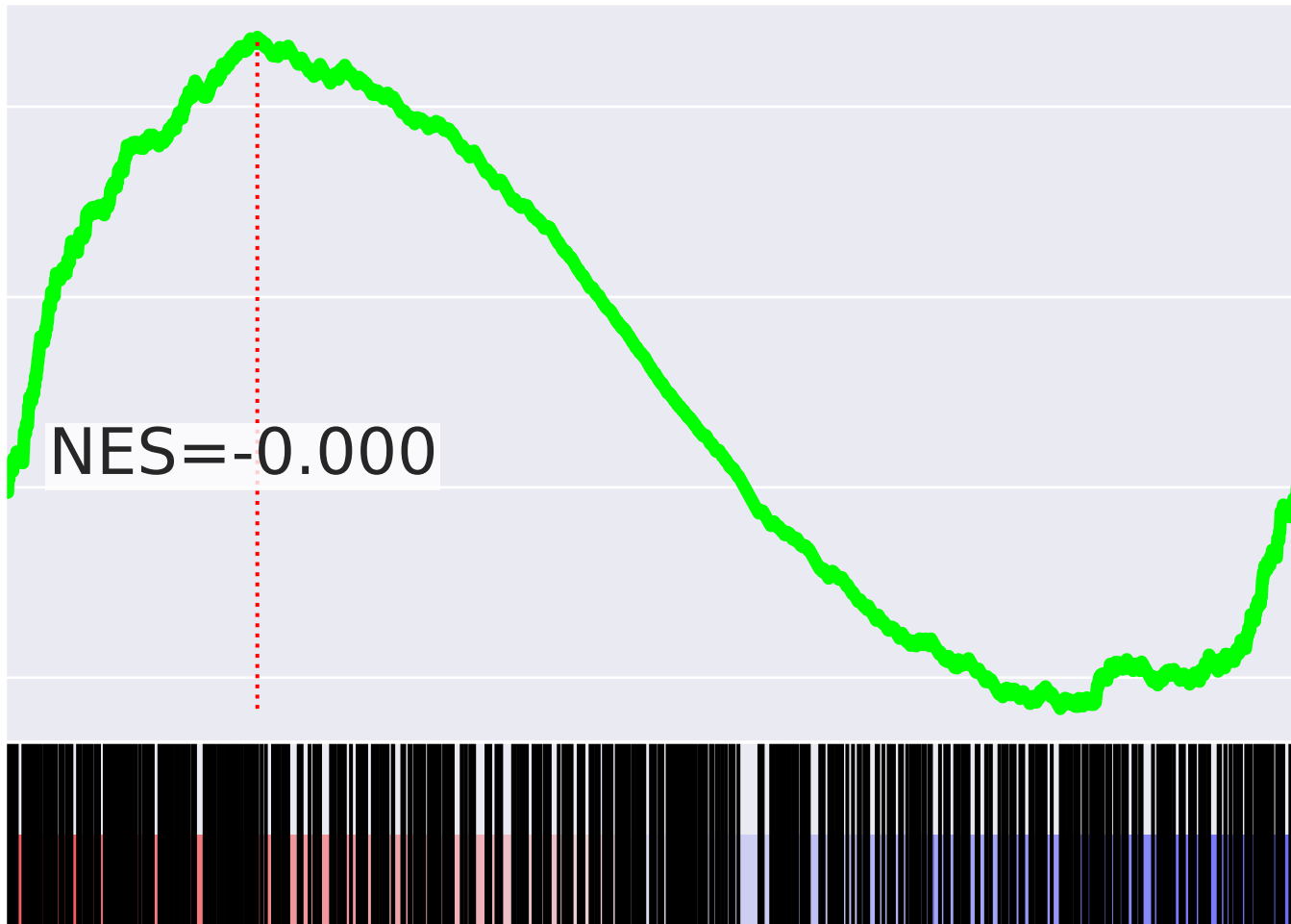
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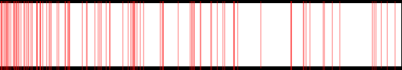
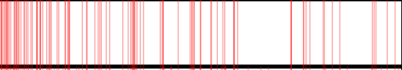
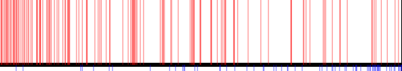
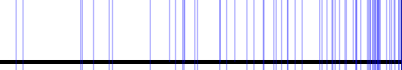
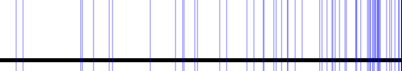
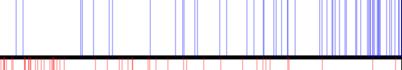
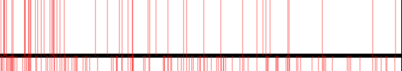
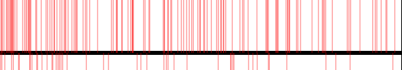
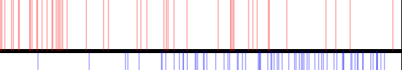
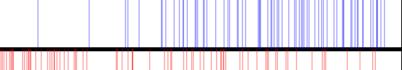
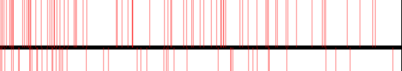
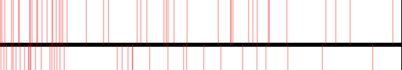

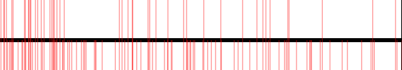

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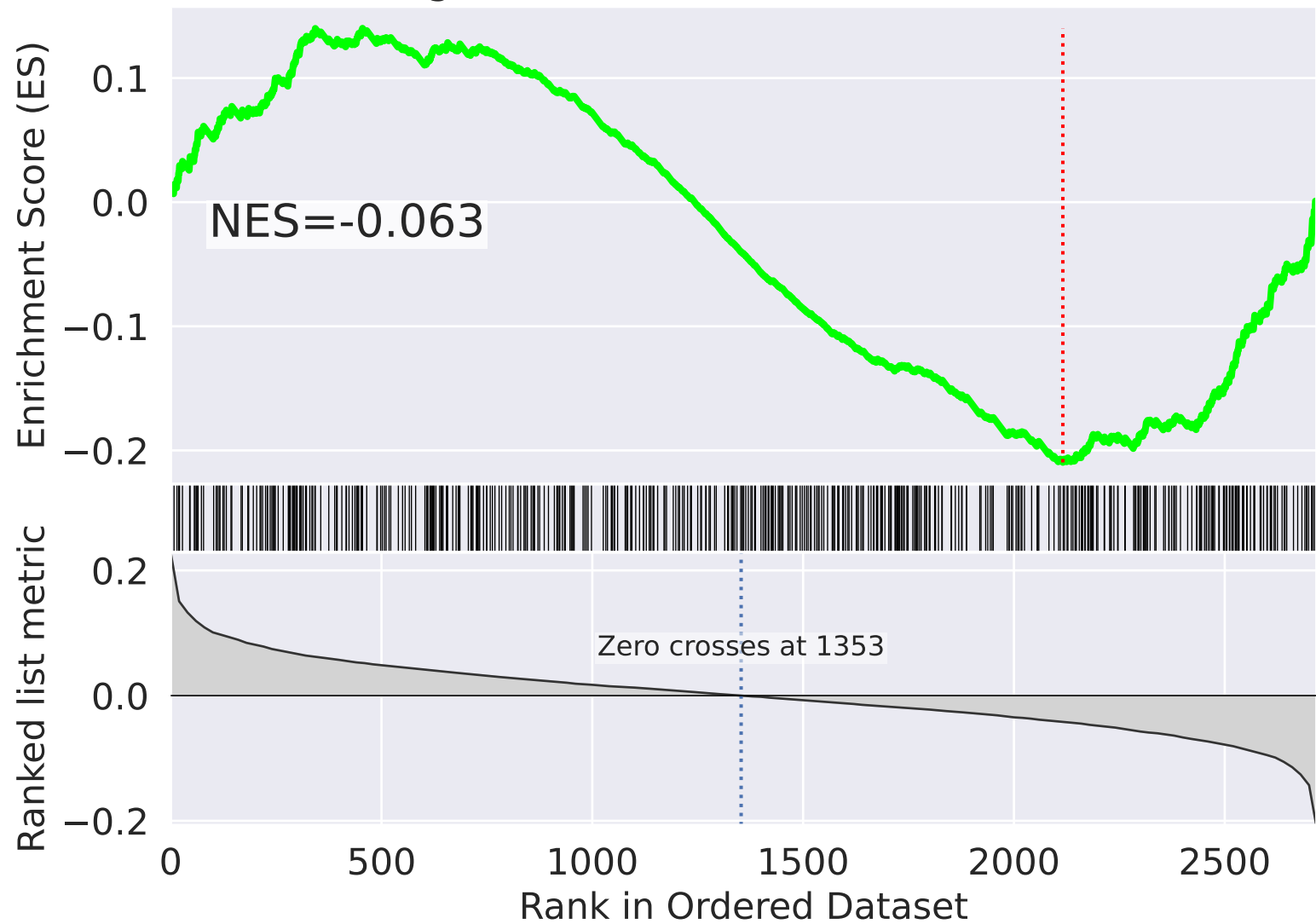
Rank



NES		SET
6.150		mRNA Splicing R-HSA-72172
6.050		mRNA Splicing - Major Pathway R-HSA-72163
6.007		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
-5.809		rRNA Processing R-HSA-72312
-5.393		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
-5.019		Major Pathway Of rRNA Processing In Nucleolus And Cytosol R-HSA-6791226
4.690		APC/C:Cdh1 Mediated Degradation Of Cdc20 And APC/C:Cdh1 Targets In Late Mitosis/Early G1 R-HSA-174178
4.660		HIV Infection R-HSA-162906
4.617		Transport To Golgi And Subsequent Modification R-HSA-948021
-4.568		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
4.567		Host Interactions Of HIV Factors R-HSA-162909
4.540		ER To Golgi Anterograde Transport R-HSA-199977
4.490		SCF-beta-TrCP Mediated Degradation Of Emi1 R-HSA-174113
4.490		APC/C:Cdc20 Mediated Degradation Of Securin R-HSA-174154
4.479		Separation Of Sister Chromatids R-HSA-2467813

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=70$

Signal Transduction R-HSA-162582



Signal Transduction R-HSA-162582

ES

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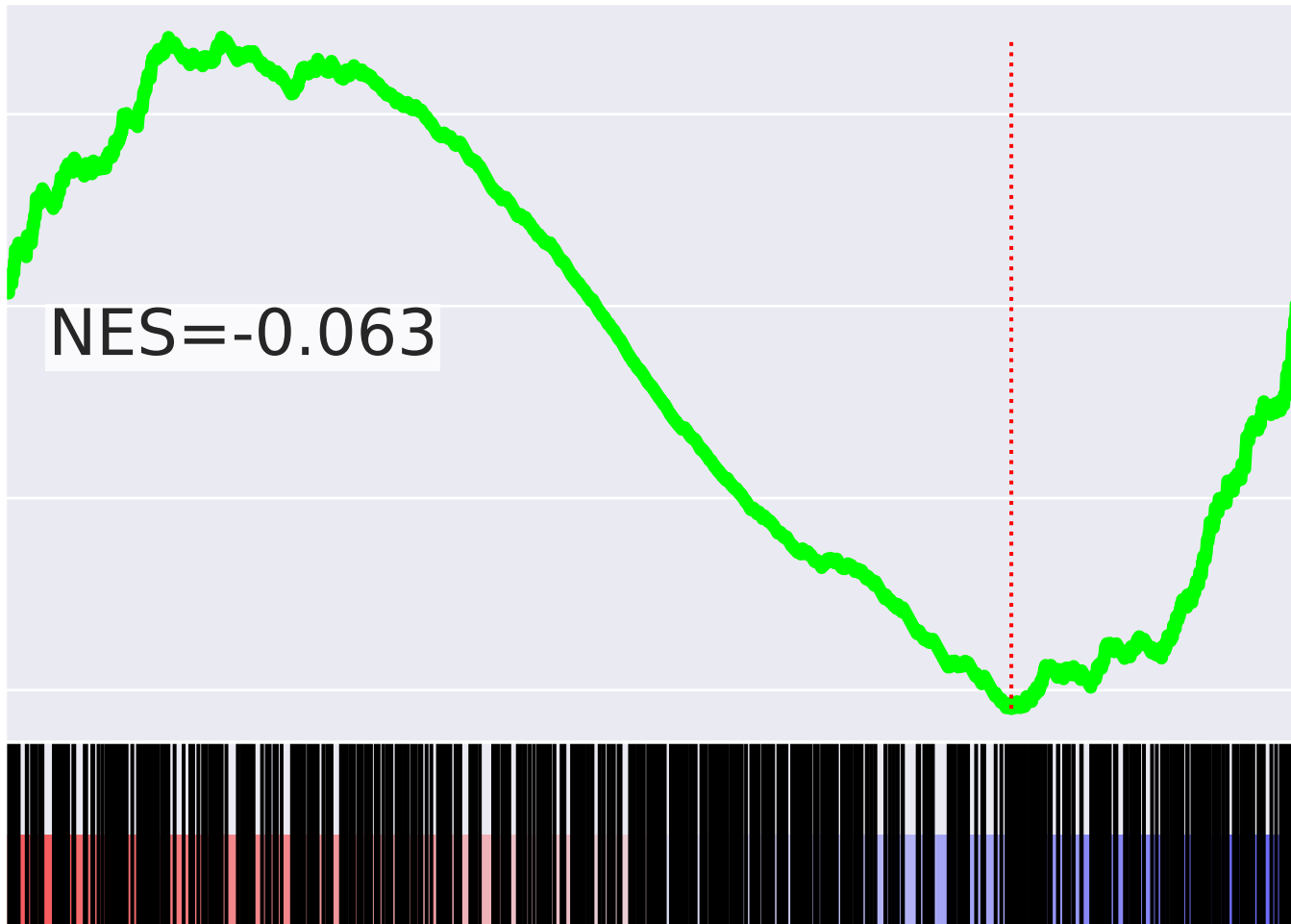
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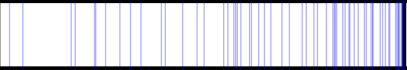
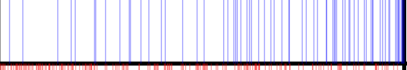
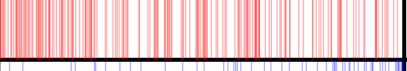
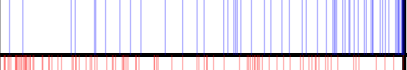
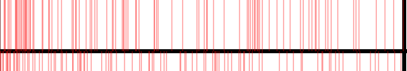
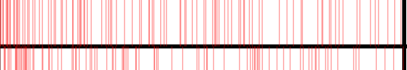
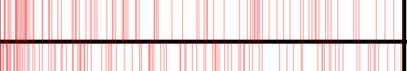
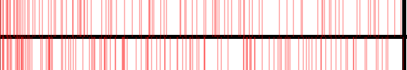
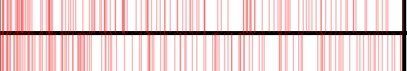
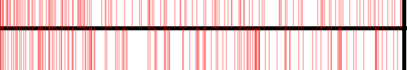
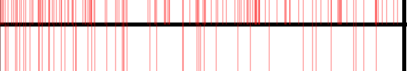
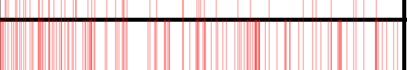
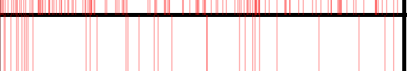
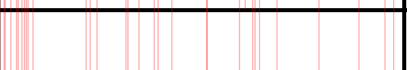
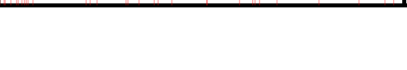
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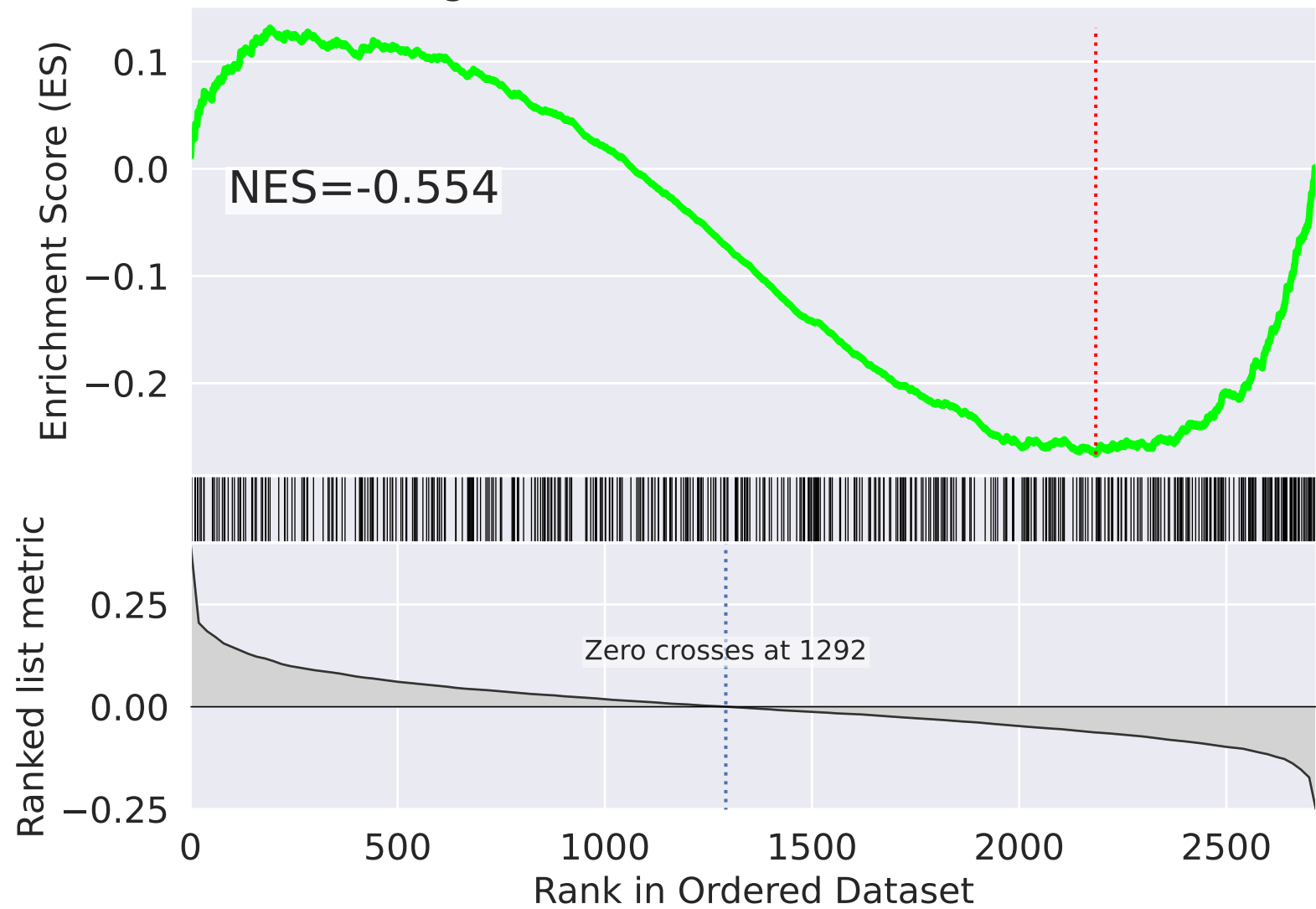
Rank



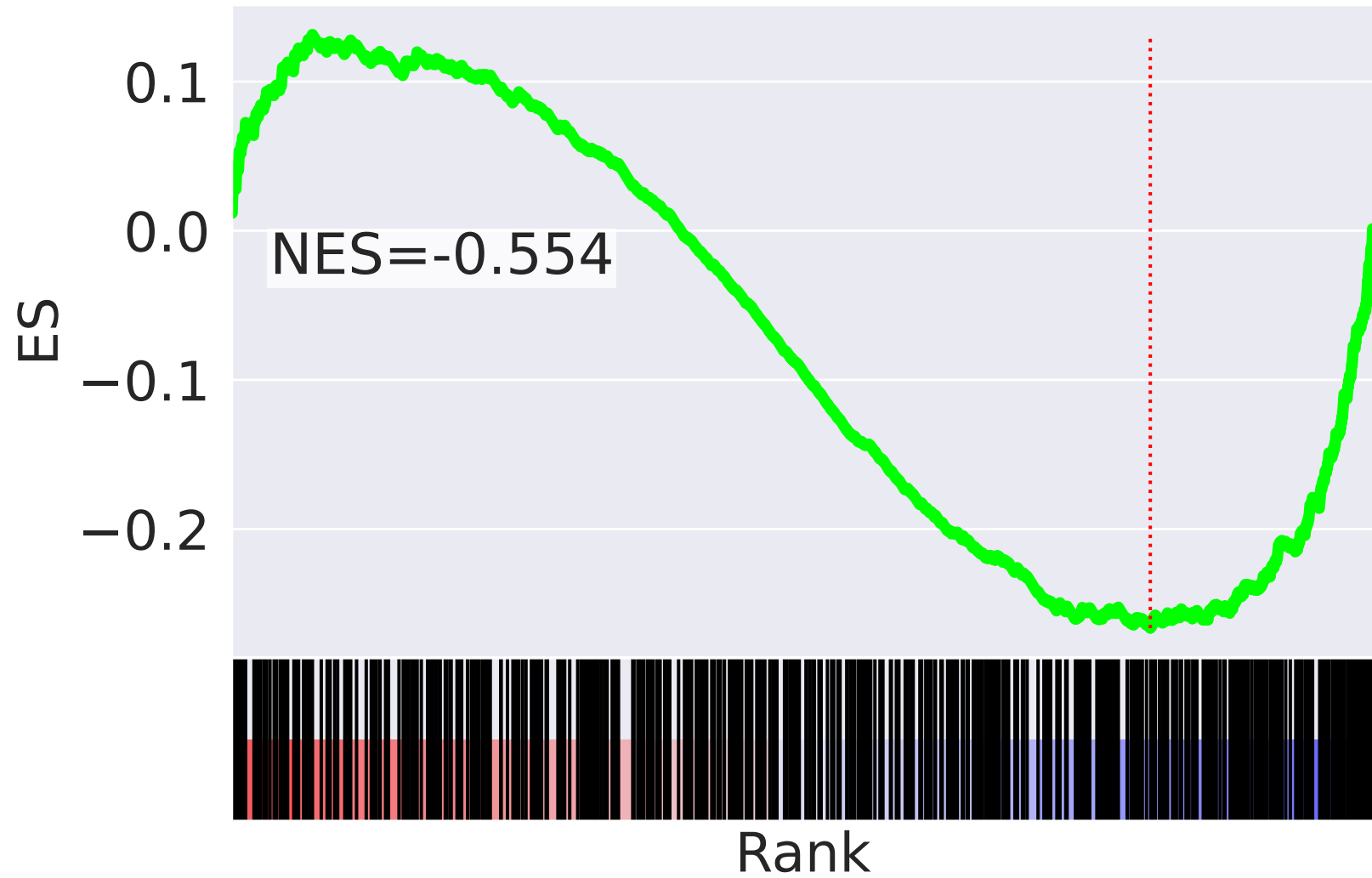
NES		SET
-5.062		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
-5.002		rRNA Processing R-HSA-72312
4.962		M Phase R-HSA-68886
-4.913		Major Pathway Of rRNA Processing In Nucleolus And Cytosol R-HSA-6791226
4.379		Mitotic G2-G2/M Phases R-HSA-453274
4.280		mRNA Splicing - Major Pathway R-HSA-72163
4.244		G2/M Transition R-HSA-69275
4.140		mRNA Splicing R-HSA-72172
4.108		HIV Infection R-HSA-162906
4.049		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
3.694		Mitotic Metaphase And Anaphase R-HSA-2555396
3.687		APC/C:Cdh1 Mediated Degradation Of Cdc20 And APC/C:Cdh1 Targets In Late Mitosis/Early G1 R-HSA-174178
3.619		Mitotic Anaphase R-HSA-68882
3.615		Recruitment Of NuMA To Mitotic Centrosomes R-HSA-380320
3.607		Centrosome Maturation R-HSA-380287

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=71$

Signal Transduction R-HSA-162582


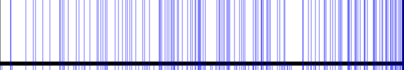

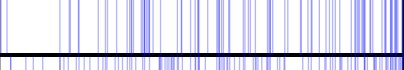
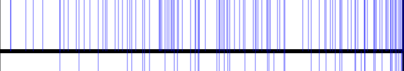
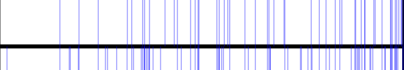
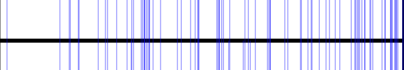
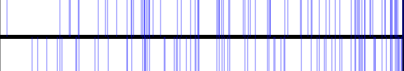

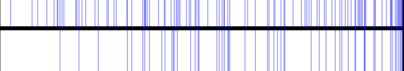
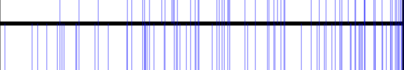
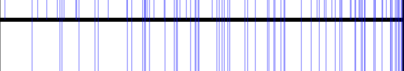
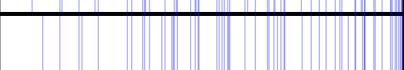
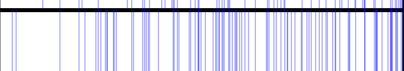



Signal Transduction R-HSA-162582



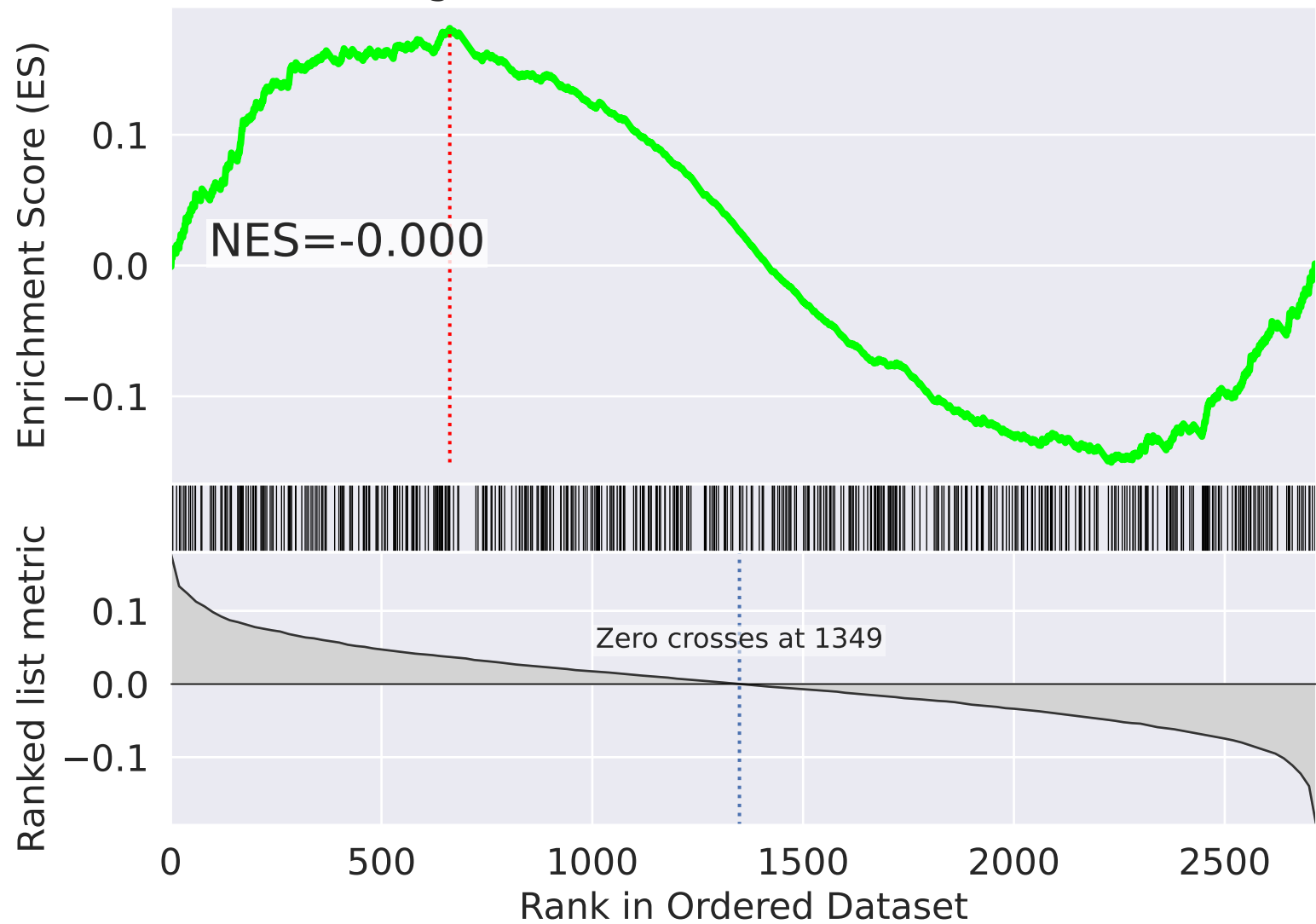
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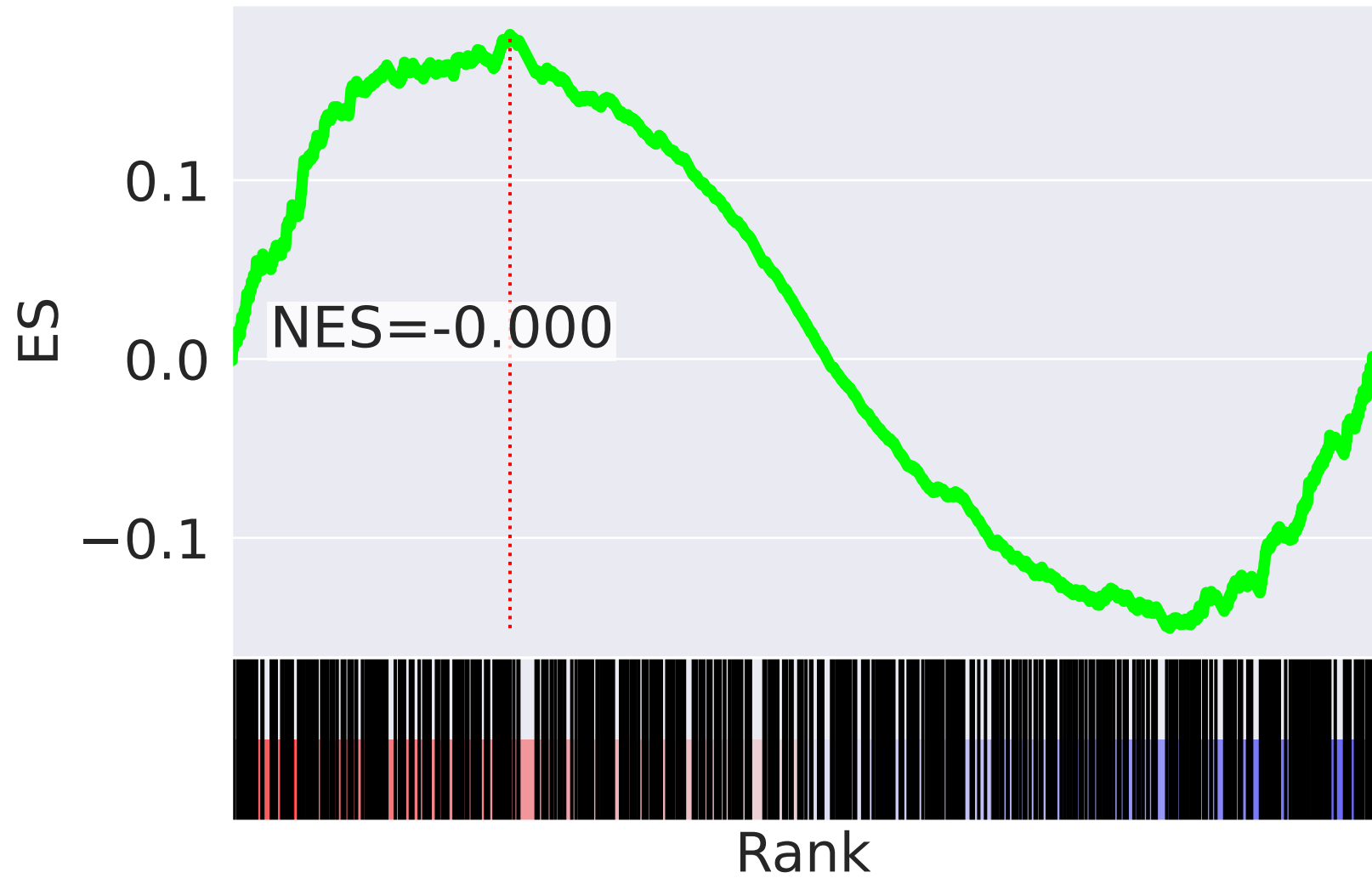
-4.918		Mitotic Metaphase And Anaphase R-HSA-2555396
-4.781		Mitotic Anaphase R-HSA-68882
-4.513		M Phase R-HSA-68886
-4.474		MAPK Family Signaling Cascades R-HSA-5683057
-4.458		Separation Of Sister Chromatids R-HSA-2467813
-4.343		CDK-mediated Phosphorylation And Removal Of Cdc6 R-HSA-69017
-4.321		RAF/MAP Kinase Cascade R-HSA-5673001
-4.293		MAPK1/MAPK3 Signaling R-HSA-5684996
-4.258		Synthesis Of DNA R-HSA-69239
-4.231		S Phase R-HSA-69242
-4.222		Regulation Of APC/C Activators Between G1/S And Early Anaphase R-HSA-176408
-4.172		DNA Replication R-HSA-69306
-4.146		Switching Of Origins To A Post-Replicative State R-HSA-69052
-4.020		APC/C-mediated Degradation Of Cell Cycle Proteins R-HSA-174143
-3.993		Mitotic G2-G2/M Phases R-HSA-453274

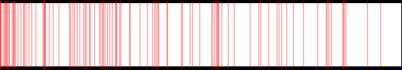
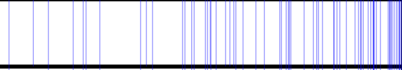
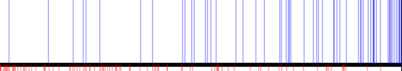
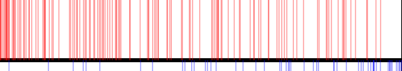
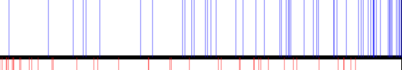
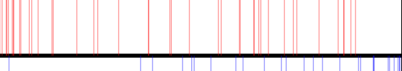
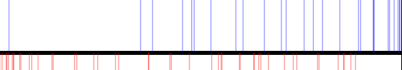
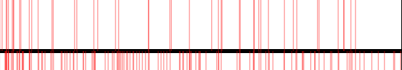
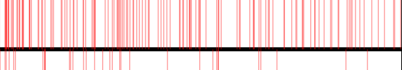
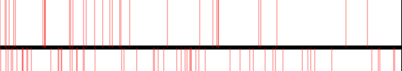
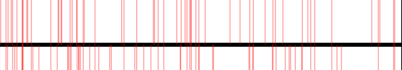
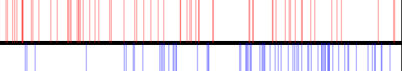
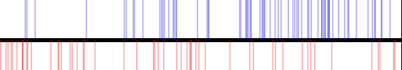

The three following figures visualize the gene set enrichment analysis results for Signal Transduction R-HSA-162582 in the latent dimension $z=72$

Signal Transduction R-HSA-162582



Signal Transduction R-HSA-162582



NES		SET
5.681		mRNA Splicing R-HSA-72172
-5.611		rRNA Processing R-HSA-72312
-5.501		rRNA Processing In Nucleus And Cytosol R-HSA-8868773
5.466		mRNA Splicing - Major Pathway R-HSA-72163
5.374		Processing Of Capped Intron-Containing Pre-mRNA R-HSA-72203
-5.070		Major Pathway Of rRNA Processing In Nucleolus And Cytosol R-HSA-6791226
3.756		Transport Of Mature mRNA Derived From An Intron-Containing Transcript R-HSA-159236
-3.693		rRNA Modification In Nucleus And Cytosol R-HSA-6790901
3.536		Transport Of Mature Transcript To Cytoplasm R-HSA-72202
3.446		HIV Infection R-HSA-162906
3.418		mRNA Splicing - Minor Pathway R-HSA-72165
3.416		Interleukin-1 Family Signaling R-HSA-446652
3.371		Metabolism Of Amino Acids And Derivatives R-HSA-71291
-3.327		Respiratory Electron Transport, ATP Synthesis By Chemiosmotic Coupling, Heat Production By Uncoupling Proteins R-HSA-163200
3.221		Interleukin-1 Signaling R-HSA-9020702