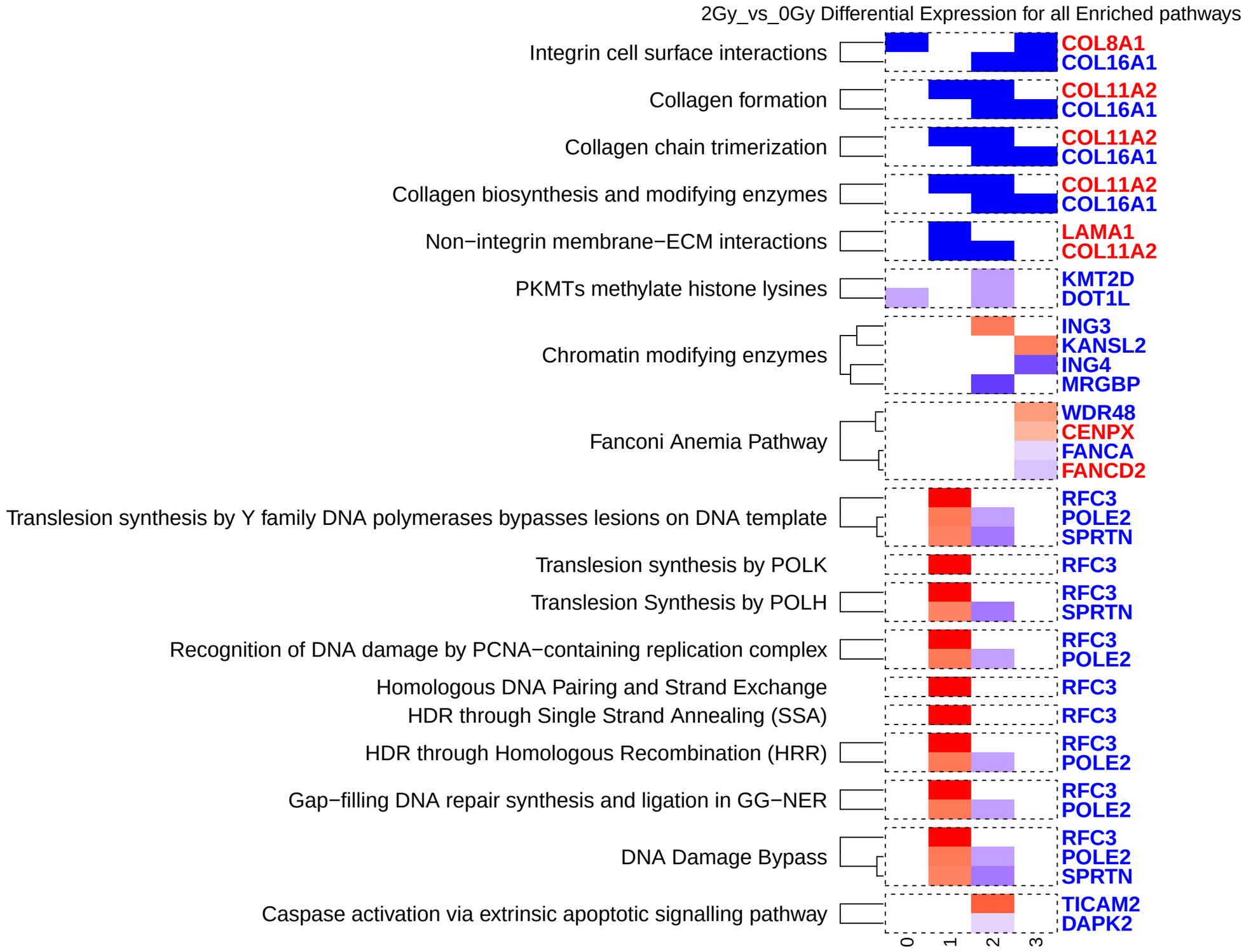
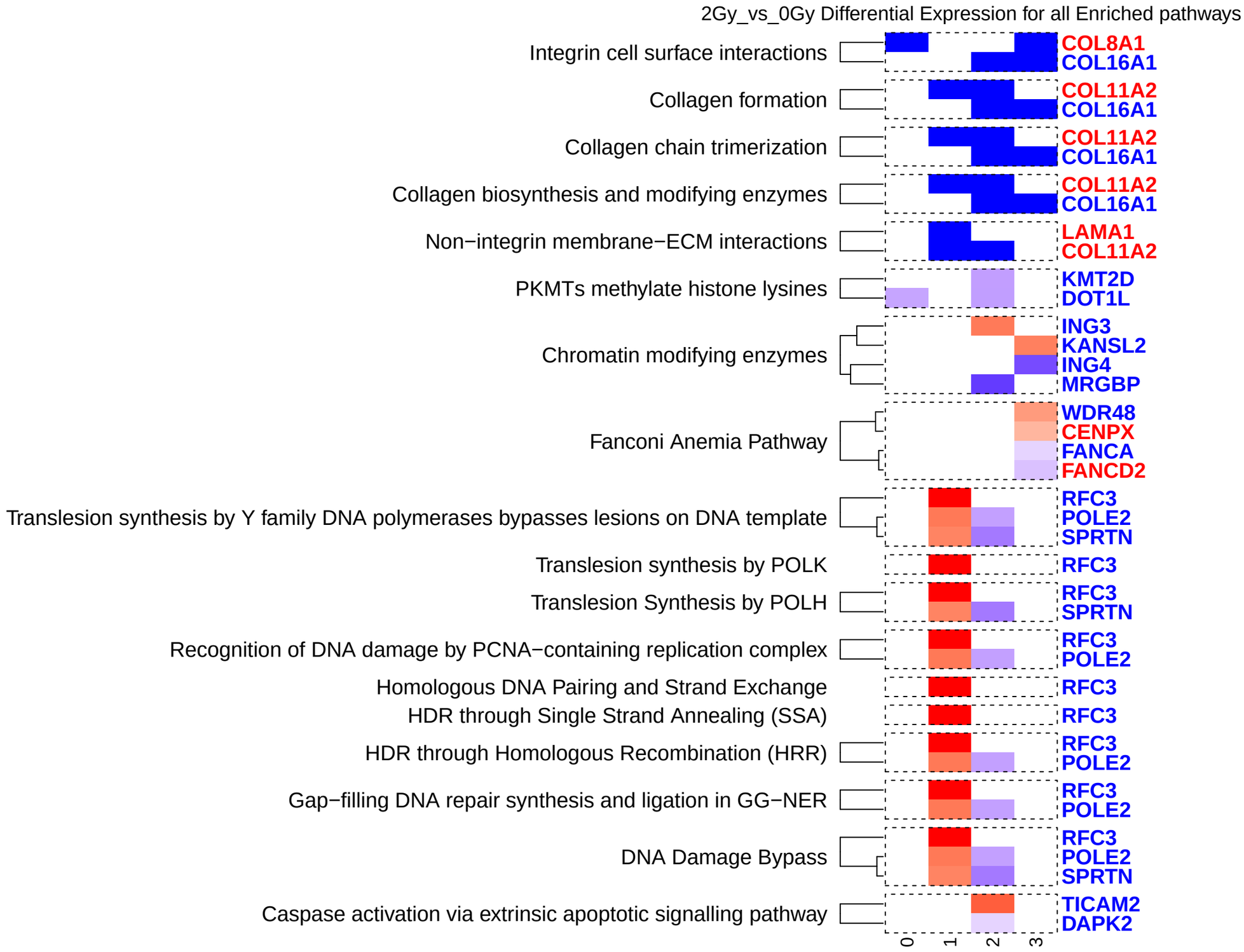
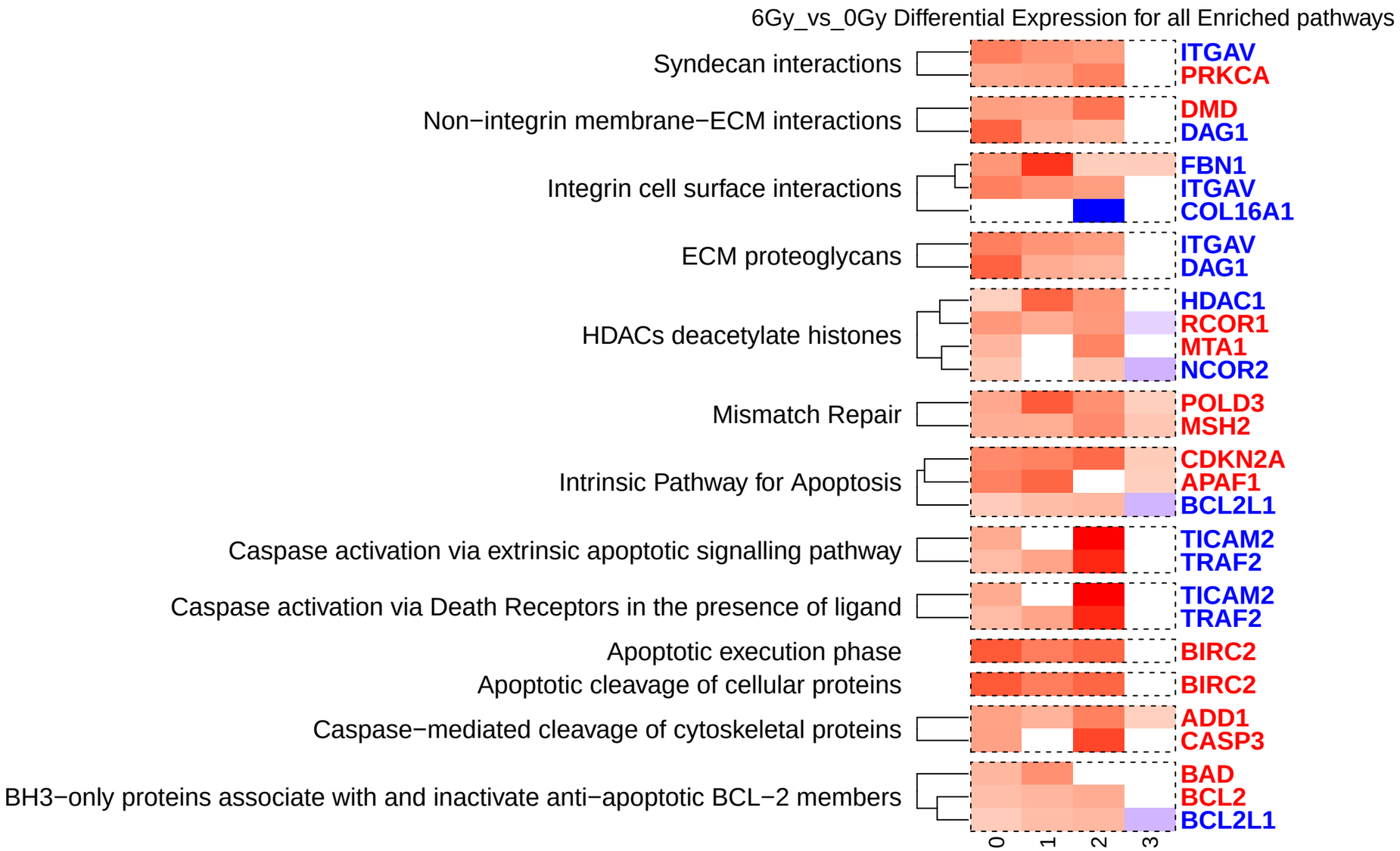
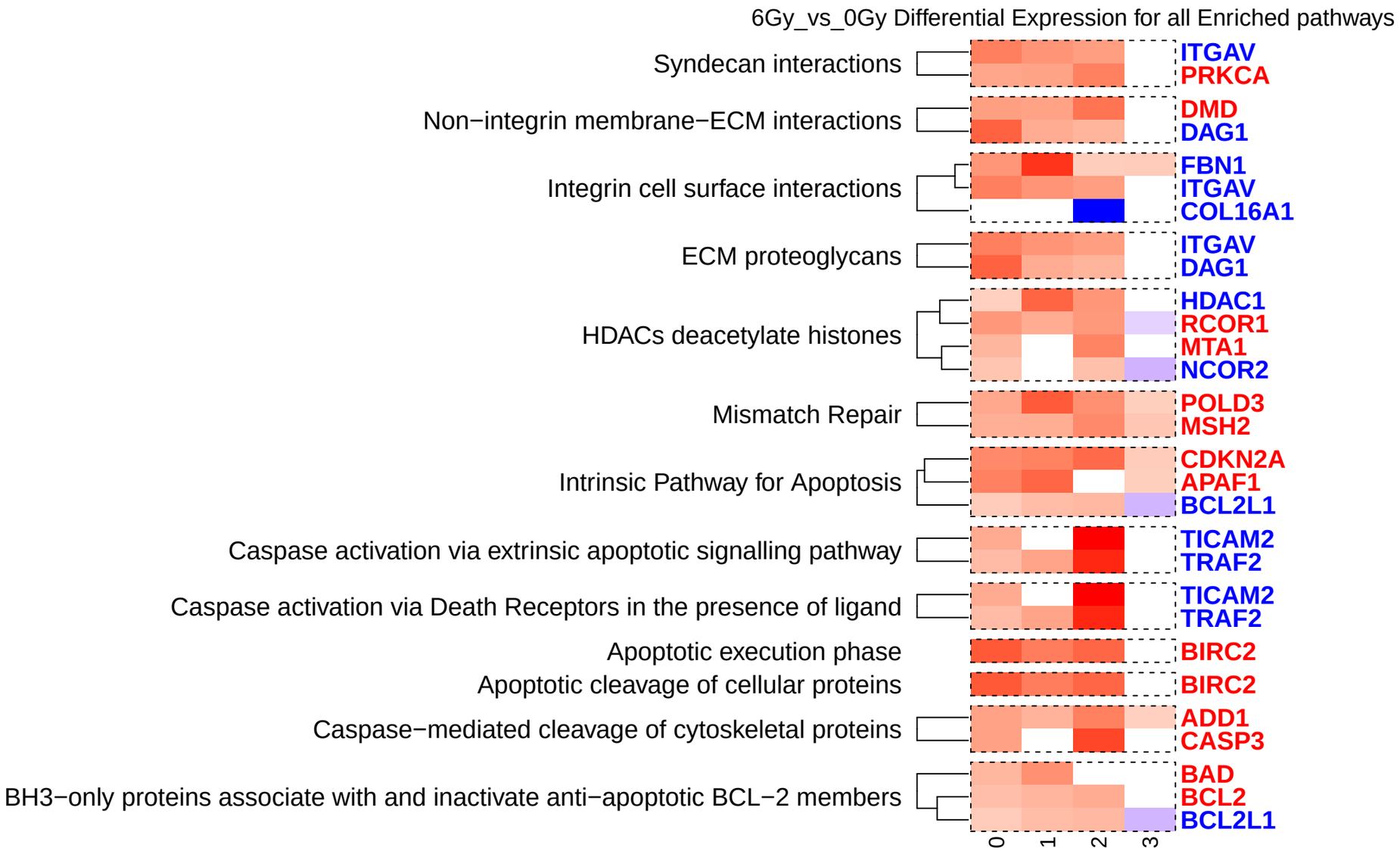
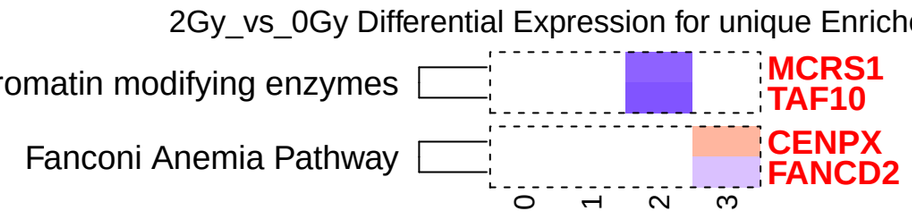
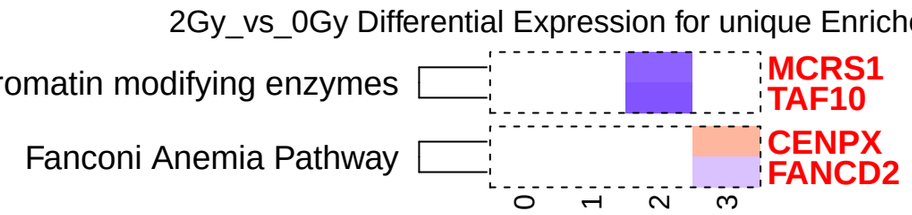

2Gy_vs_0Gy Differential Expression for all Enriched pathways
Integrin cell surface interactions
COL8A1
COL16A1
Collagen formation
COL11A2
COL16A1
Collagen chain trimerization
COL11A2
COL16A1
Collagen biosynthesis and modifying enzymes
COL11A2
COL16A1
Non−integrin membrane−ECM interactions
LAMA1
COL11A2
PKMTs methylate histone lysines
KMT2D
DOT1L
Chromatin modifying enzymes
ING3
KANSL2
ING4
MRGBP
Fanconi Anemia Pathway
WDR48
CENPX
FANCA
FANCD2
Translesion synthesis by Y family DNA polymerases bypasses lesions on DNA template
RFC3
POLE2
SPRTN
Translesion synthesis by POLK
RFC3
Translesion Synthesis by POLH
RFC3
SPRTN
Recognition of DNA damage by PCNA−containing replication complex
RFC3
POLE2
Homologous DNA Pairing and Strand Exchange
RFC3
HDR through Single Strand Annealing (SSA)
RFC3
HDR through Homologous Recombination (HRR)
RFC3
POLE2
Gap−filling DNA repair synthesis and ligation in GG−NER
RFC3
POLE2
DNA Damage Bypass
RFC3
POLE2
SPRTN
Caspase activation via extrinsic apoptotic signalling pathway
TICAM2
DAPK2
0
1
2
3

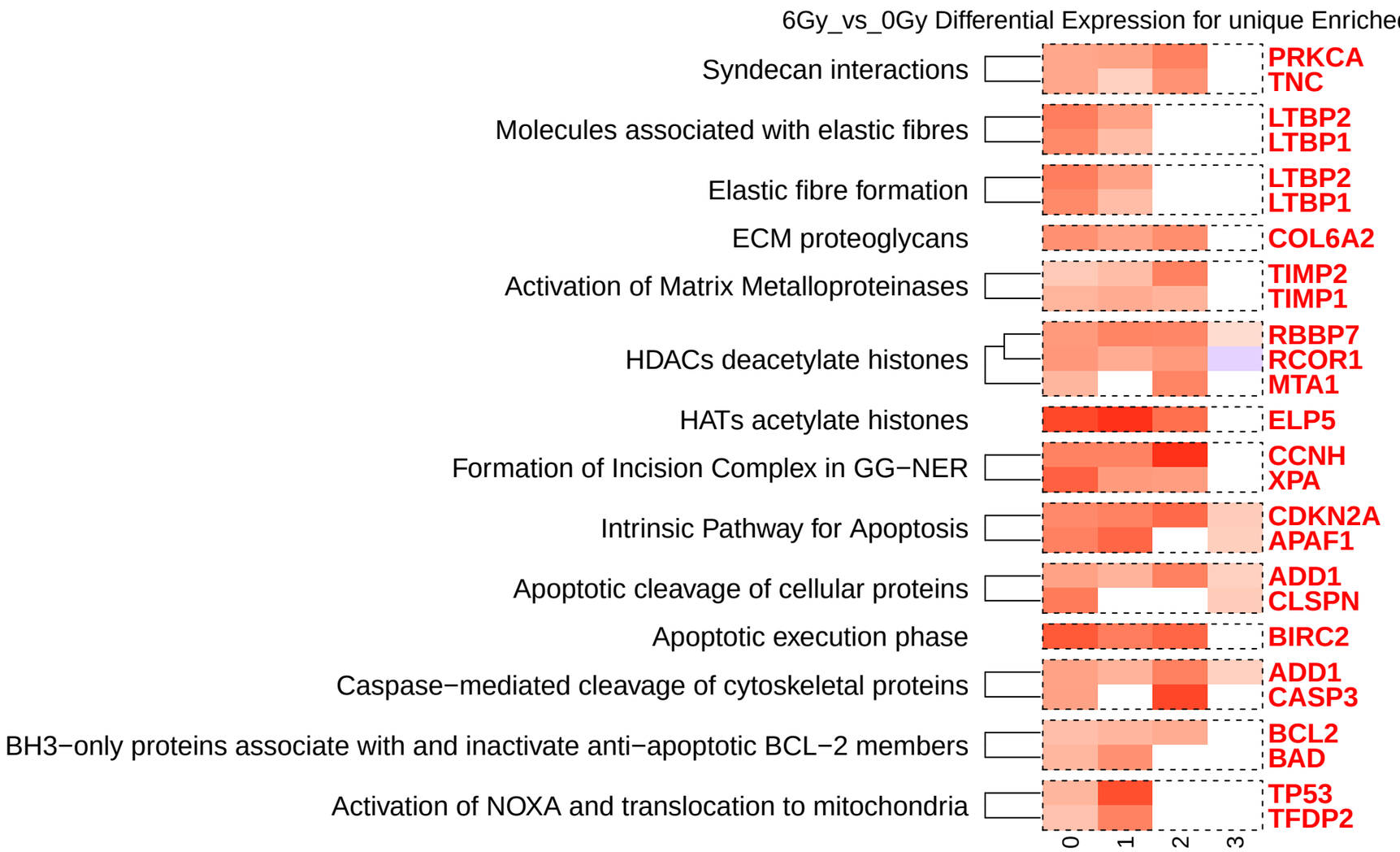

2Gy_vs_0Gy Differential Expression for all Enriched pathways
Integrin cell surface interactions
COL8A1
COL16A1
Collagen formation
COL11A2
COL16A1
Collagen chain trimerization
COL11A2
COL16A1
Collagen biosynthesis and modifying enzymes
COL11A2
COL16A1
Non−integrin membrane−ECM interactions
LAMA1
COL11A2
PKMTs methylate histone lysines
KMT2D
DOT1L
Chromatin modifying enzymes
ING3
KANSL2
ING4
MRGBP
Fanconi Anemia Pathway
WDR48
CENPX
FANCA
FANCD2
Translesion synthesis by Y family DNA polymerases bypasses lesions on DNA template
RFC3
POLE2
SPRTN
Translesion synthesis by POLK
RFC3
Translesion Synthesis by POLH
RFC3
SPRTN
Recognition of DNA damage by PCNA−containing replication complex
RFC3
POLE2
Homologous DNA Pairing and Strand Exchange
RFC3
HDR through Single Strand Annealing (SSA)
RFC3
HDR through Homologous Recombination (HRR)
RFC3
POLE2
Gap−filling DNA repair synthesis and ligation in GG−NER
RFC3
POLE2
DNA Damage Bypass
RFC3
POLE2
SPRTN
Caspase activation via extrinsic apoptotic signalling pathway
TICAM2
DAPK2
0
1
2
3

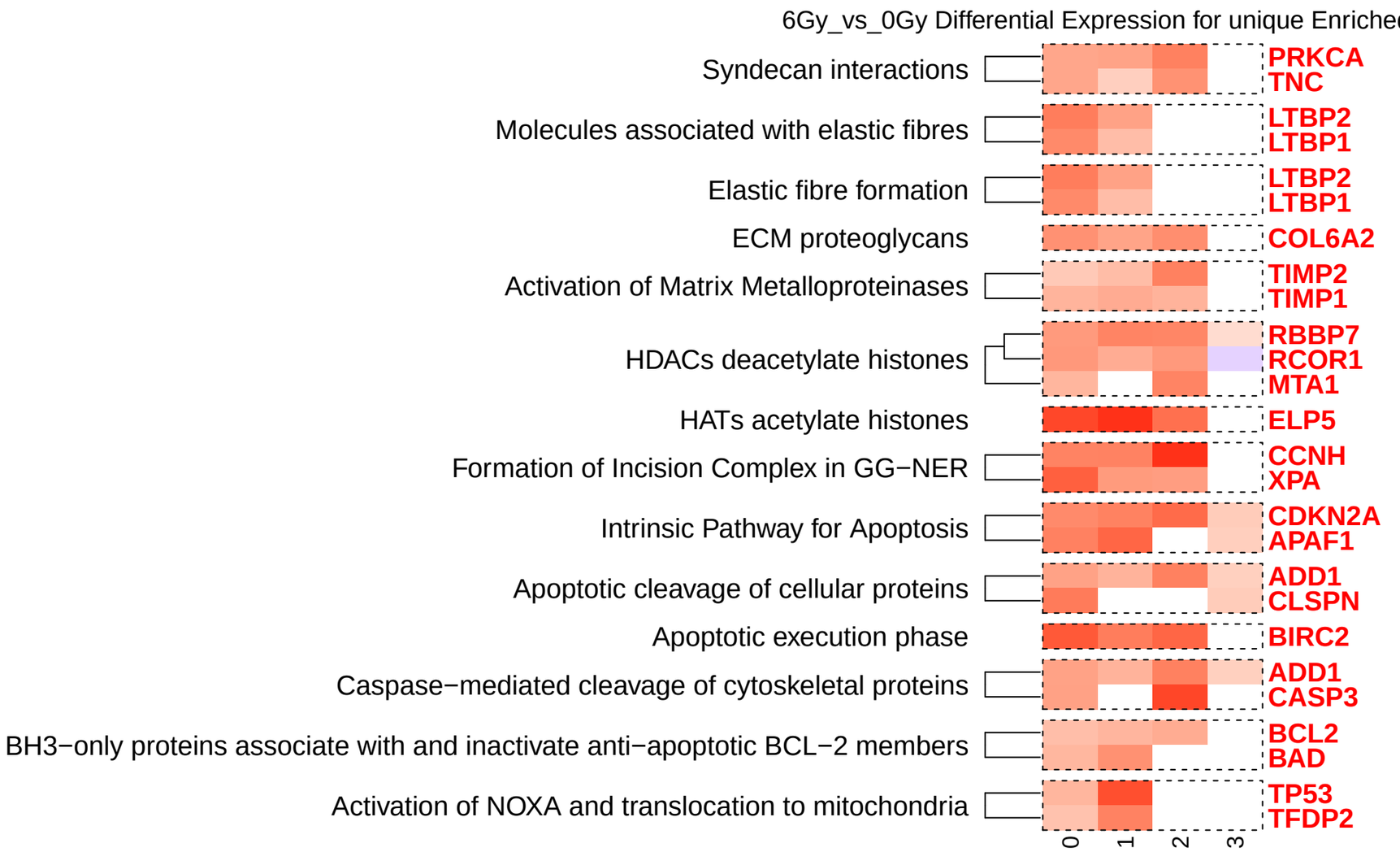

6Gy_vs_0Gy Differential Expression for all Enriched pathways
Syndecan interactions
ITGAV
PRKCA
Non−integrin membrane−ECM interactions
DMD
DAG1
Integrin cell surface interactions
FBN1
ITGAV
COL16A1
ECM proteoglycans
ITGAV
DAG1
HDACs deacetylate histones
HDAC1
RCOR1
MTA1
NCOR2
Mismatch Repair
POLD3
MSH2
Intrinsic Pathway for Apoptosis
CDKN2A
APAF1
BCL2L1
Caspase activation via extrinsic apoptotic signalling pathway
TICAM2
TRAF2
Caspase activation via Death Receptors in the presence of ligand
TICAM2
TRAF2
Apoptotic execution phase
BIRC2
Apoptotic cleavage of cellular proteins
BIRC2
Caspase−mediated cleavage of cytoskeletal proteins
ADD1
CASP3
BH3−only proteins associate with and inactivate anti−apoptotic BCL−2 members
BAD
BCL2
BCL2L1
0
1
2
3

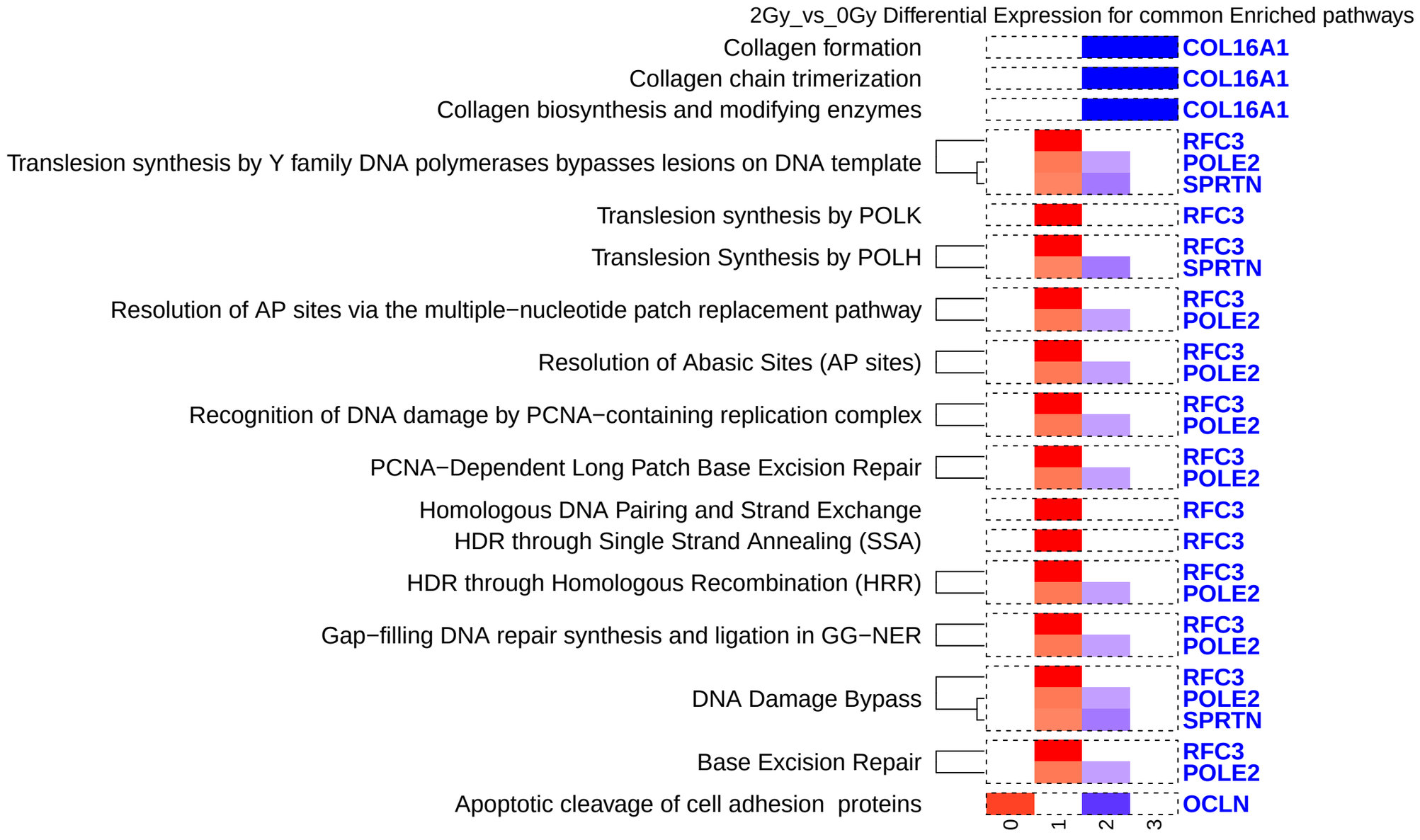

6Gy_vs_0Gy Differential Expression for all Enriched pathways
Syndecan interactions
ITGAV
PRKCA
Non−integrin membrane−ECM interactions
DMD
DAG1
Integrin cell surface interactions
FBN1
ITGAV
COL16A1
ECM proteoglycans
ITGAV
DAG1
HDACs deacetylate histones
HDAC1
RCOR1
MTA1
NCOR2
Mismatch Repair
POLD3
MSH2
Intrinsic Pathway for Apoptosis
CDKN2A
APAF1
BCL2L1
Caspase activation via extrinsic apoptotic signalling pathway
TICAM2
TRAF2
Caspase activation via Death Receptors in the presence of ligand
TICAM2
TRAF2
Apoptotic execution phase
BIRC2
Apoptotic cleavage of cellular proteins
BIRC2
Caspase−mediated cleavage of cytoskeletal proteins
ADD1
CASP3
BH3−only proteins associate with and inactivate anti−apoptotic BCL−2 members
BAD
BCL2
BCL2L1
0
1
2
3

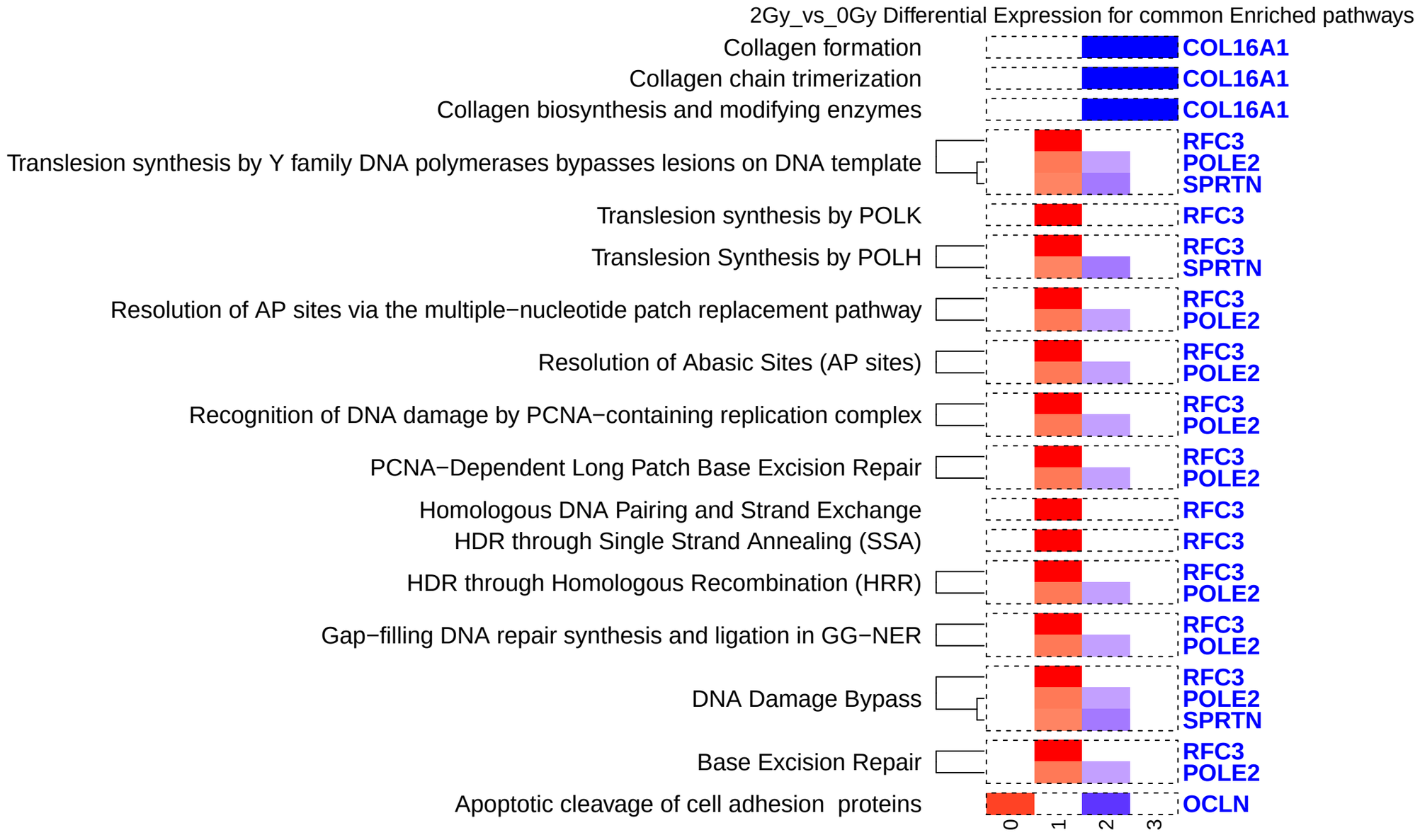

2Gy_vs_0Gy Differential Expression for unique Enriched pathways
Chromatin modifying enzymes
MCRS1
TAF10
Fanconi Anemia Pathway
CENPX
FANCD2
0
1
2
3

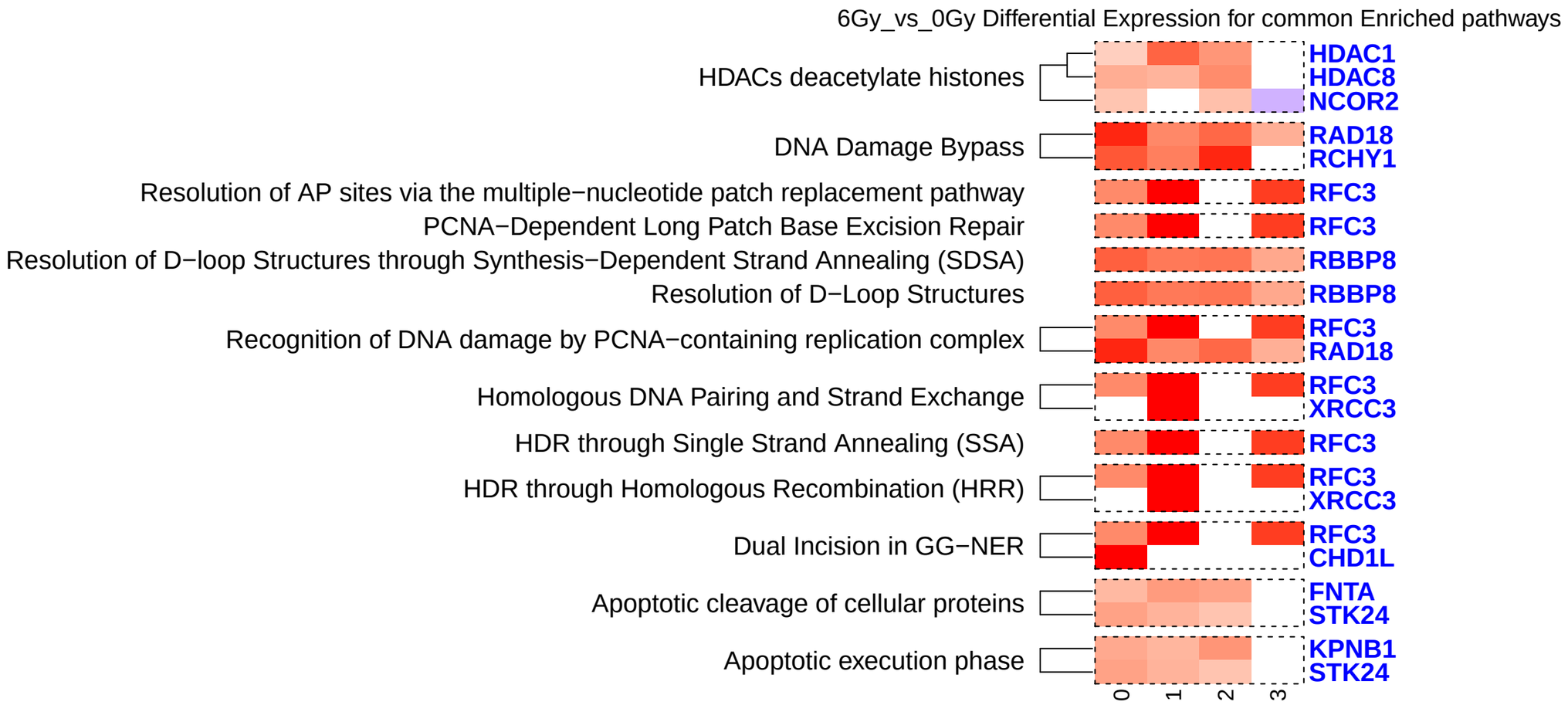

2Gy_vs_0Gy Differential Expression for unique Enriched pathways
Chromatin modifying enzymes
MCRS1
TAF10
Fanconi Anemia Pathway
CENPX
FANCD2
0
1
2
3

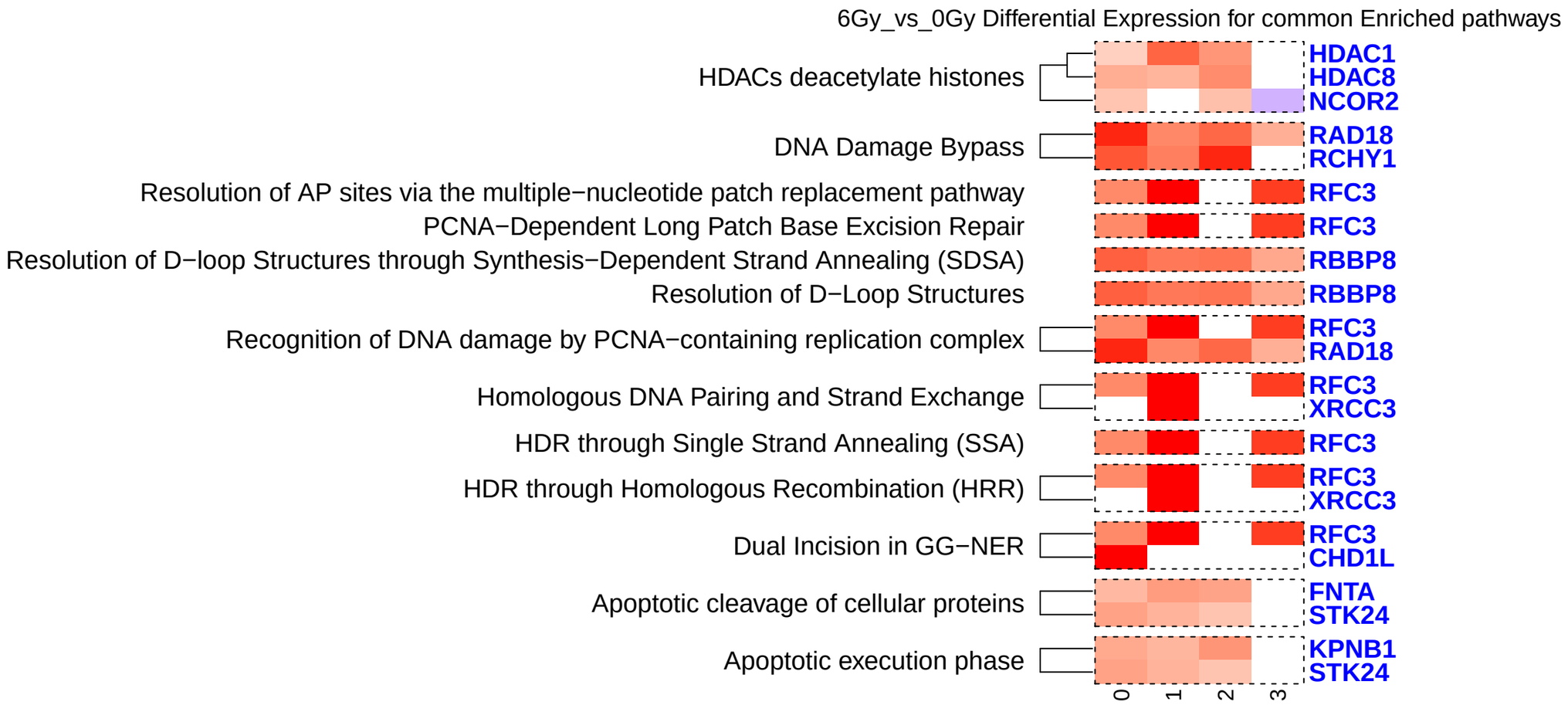

6Gy_vs_0Gy Differential Expression for unique Enriched pathways
Syndecan interactions
PRKCA
TNC
Molecules associated with elastic fibres
LTBP2
LTBP1
Elastic fibre formation
LTBP2
LTBP1
ECM proteoglycans
COL6A2
Activation of Matrix Metalloproteinases
TIMP2
TIMP1
HDACs deacetylate histones
RBBP7
RCOR1
MTA1
HATs acetylate histones
ELP5
Formation of Incision Complex in GG−NER
CCNH
XPA
Intrinsic Pathway for Apoptosis
CDKN2A
APAF1
Apoptotic cleavage of cellular proteins
ADD1
CLSPN
Apoptotic execution phase
BIRC2
Caspase−mediated cleavage of cytoskeletal proteins
ADD1
CASP3
BH3−only proteins associate with and inactivate anti−apoptotic BCL−2 members
BCL2
BAD
Activation of NOXA and translocation to mitochondria
TP53
TFDP2
0
1
2
3


6Gy_vs_0Gy Differential Expression for unique Enriched pathways
Syndecan interactions
PRKCA
TNC
Molecules associated with elastic fibres
LTBP2
LTBP1
Elastic fibre formation
LTBP2
LTBP1
ECM proteoglycans
COL6A2
Activation of Matrix Metalloproteinases
TIMP2
TIMP1
HDACs deacetylate histones
RBBP7
RCOR1
MTA1
HATs acetylate histones
ELP5
Formation of Incision Complex in GG−NER
CCNH
XPA
Intrinsic Pathway for Apoptosis
CDKN2A
APAF1
Apoptotic cleavage of cellular proteins
ADD1
CLSPN
Apoptotic execution phase
BIRC2
Caspase−mediated cleavage of cytoskeletal proteins
ADD1
CASP3
BH3−only proteins associate with and inactivate anti−apoptotic BCL−2 members
BCL2
BAD
Activation of NOXA and translocation to mitochondria
TP53
TFDP2
0
1
2
3


2Gy_vs_0Gy Differential Expression for common Enriched pathways
Collagen formation
Collagen chain trimerization
Collagen biosynthesis and modifying enzymes
Translesion synthesis by Y family DNA polymerases bypasses lesions on DNA template
Translesion synthesis by POLK
Translesion Synthesis by POLH
Resolution of AP sites via the multiple−nucleotide patch replacement pathway
Resolution of Abasic Sites (AP sites)
Recognition of DNA damage by PCNA−containing replication complex
PCNA−Dependent Long Patch Base Excision Repair
Homologous DNA Pairing and Strand Exchange
HDR through Single Strand Annealing (SSA)
HDR through Homologous Recombination (HRR)
Gap−filling DNA repair synthesis and ligation in GG−NER
DNA Damage Bypass
Base Excision Repair
Apoptotic cleavage of cell adhesion proteins
COL16A1
COL16A1
COL16A1
RFC3
POLE2
SPRTN
RFC3
RFC3
SPRTN
RFC3
POLE2
RFC3
POLE2
RFC3
POLE2
RFC3
POLE2
RFC3
POLE2
RFC3
POLE2
SPRTN
RFC3
POLE2
OCLN
0
1
2
3


2Gy_vs_0Gy Differential Expression for common Enriched pathways
Collagen formation
Collagen chain trimerization
Collagen biosynthesis and modifying enzymes
Translesion synthesis by Y family DNA polymerases bypasses lesions on DNA template
Translesion synthesis by POLK
Translesion Synthesis by POLH
Resolution of AP sites via the multiple−nucleotide patch replacement pathway
Resolution of Abasic Sites (AP sites)
Recognition of DNA damage by PCNA−containing replication complex
PCNA−Dependent Long Patch Base Excision Repair
Homologous DNA Pairing and Strand Exchange
HDR through Single Strand Annealing (SSA)
HDR through Homologous Recombination (HRR)
Gap−filling DNA repair synthesis and ligation in GG−NER
DNA Damage Bypass
Base Excision Repair
Apoptotic cleavage of cell adhesion proteins
COL16A1
COL16A1
COL16A1
RFC3
POLE2
SPRTN
RFC3
RFC3
SPRTN
RFC3
POLE2
RFC3
POLE2
RFC3
POLE2
RFC3
POLE2
RFC3
POLE2
RFC3
POLE2
SPRTN
RFC3
POLE2
OCLN
0
1
2
3


6Gy_vs_0Gy Differential Expression for common Enriched pathways
HDACs deacetylate histones
HDAC1
HDAC8
NCOR2
DNA Damage Bypass
RAD18
RCHY1
Resolution of AP sites via the multiple−nucleotide patch replacement pathway
RFC3
PCNA−Dependent Long Patch Base Excision Repair
RFC3
Resolution of D−loop Structures through Synthesis−Dependent Strand Annealing (SDSA)
RBBP8
Resolution of D−Loop Structures
RBBP8
Recognition of DNA damage by PCNA−containing replication complex
RFC3
RAD18
Homologous DNA Pairing and Strand Exchange
RFC3
XRCC3
HDR through Single Strand Annealing (SSA)
RFC3
HDR through Homologous Recombination (HRR)
RFC3
XRCC3
Dual Incision in GG−NER
RFC3
CHD1L
Apoptotic cleavage of cellular proteins
FNTA
STK24
Apoptotic execution phase
KPNB1
STK24
0
1
2
3


6Gy_vs_0Gy Differential Expression for common Enriched pathways
HDACs deacetylate histones
HDAC1
HDAC8
NCOR2
DNA Damage Bypass
RAD18
RCHY1
Resolution of AP sites via the multiple−nucleotide patch replacement pathway
RFC3
PCNA−Dependent Long Patch Base Excision Repair
RFC3
Resolution of D−loop Structures through Synthesis−Dependent Strand Annealing (SDSA)
RBBP8
Resolution of D−Loop Structures
RBBP8
Recognition of DNA damage by PCNA−containing replication complex
RFC3
RAD18
Homologous DNA Pairing and Strand Exchange
RFC3
XRCC3
HDR through Single Strand Annealing (SSA)
RFC3
HDR through Homologous Recombination (HRR)
RFC3
XRCC3
Dual Incision in GG−NER
RFC3
CHD1L
Apoptotic cleavage of cellular proteins
FNTA
STK24
Apoptotic execution phase
KPNB1
STK24
0
1
2
3