# Overview DECO analysis report

## **RDA** information

Contrast design: Binary
Number of samples: 67
Total iterations: 1000

Positive DE iterations: 418

DE features: 14996

Minimum repeats: 0
LIMMA q.value threshold: 0.05
RDA resampling size: 3

## **NSCA** information

	Control samples	Case samples
Variability explained by NSCA	80.037	80.476
NSCA C-statistic p.value	1	0
Huber's gamma	0.675	0.667

## Feature ranking information

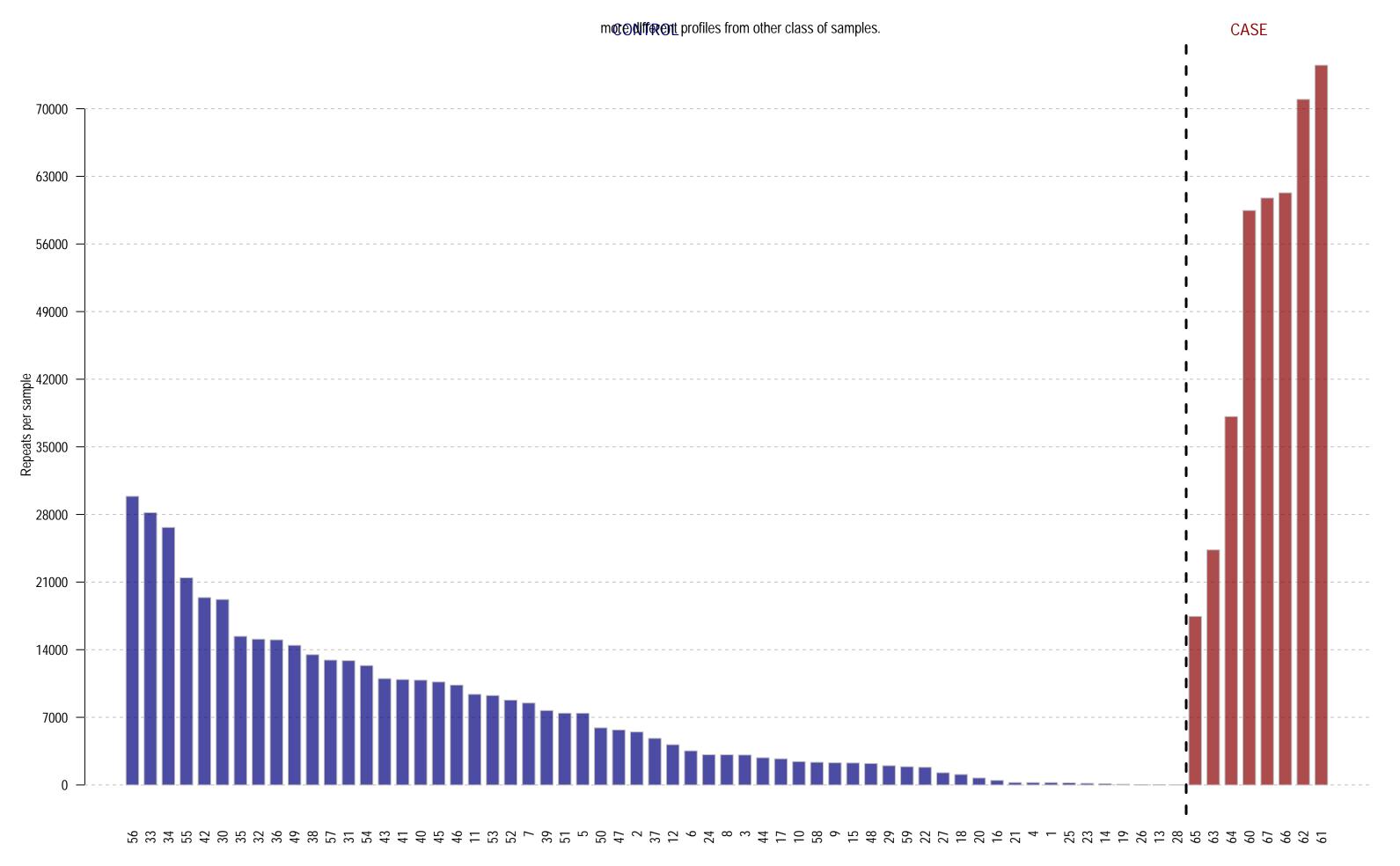
Ranking	ID	SYMBOL	UpDw	Profile
Ĭ	EPS8L3	EPS8L3	DÓWN	Complete
2	LEFTY2	LEFTY2	DOWN	Majority
3	CD200R1L	CD200R1L	DOWN	Majority
4	CDHR5	CDHR5	DOWN	Majority
5	CTRB1	CTRB1	DOWN	Majority
6	ECM2	ECM2	DOWN	Majority
7	PTH1R	PTH1R	DOWN	Majority
8	FPR2	FPR2	DOWN	Majority
9	SH3GL3	SH3GL3	DOWN	Majority
10	DRD3	DRD3	DOWN	Complete

## Subclass information

	Samples	FeaturesUP	FeaturesDOWN	average.hStat.perc95	Binary	isRelevant
FERTILE Subclass 1	29	506	41	20.60407	0	FALSE
FERTILE Subclass 2	24	6793	239	19.98736	0	FALSE
FERTILE Subclass 3	6	6531	886	17.72261	0	FALSE
COMBINED_INFERTILITY Subclass 1	1	339	1900	35.41198	1	TRUE
COMBINED_INFERTILITY Subclass 2	1	332	1085	34.69098	1	TRUE
COMBINED_INFERTILITY Subclass 3	2	822	1864	32.42158	1	TRUE
COMBINED_INFERTILITY Subclass 4	2	2812	2945	19.79197	1	TRUE
COMBINED_INFERTILITY Subclass 5	2	117	2780	51.06820	1	TRUE

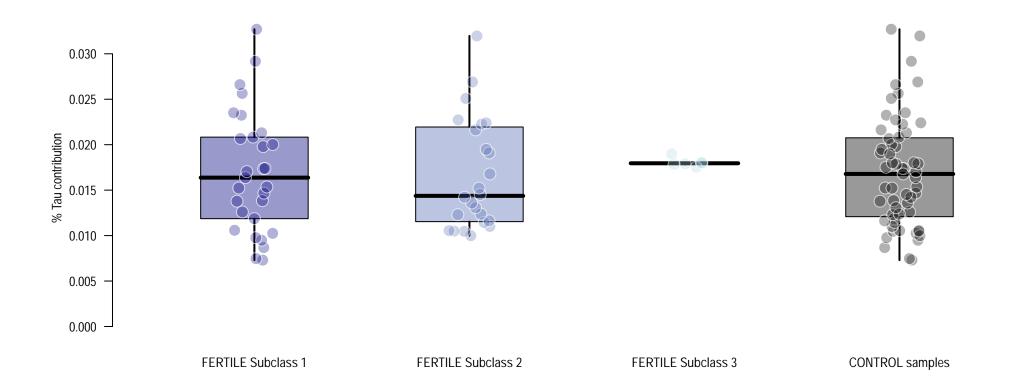
Samples	Subclass
C56	FERTILE Subclass 1
C6	FERTILE Subclass 1
C100	FERTILE Subclass 1
C84 C39	FERTILE Subclass 1 FERTILE Subclass 1
C54	FERTILE Subclass 1 FERTILE Subclass 1
C34	FERTILE Subclass 1 FERTILE Subclass 1
C68	FERTILE Subclass 1 FERTILE Subclass 1
C13	FERTILE Subclass 1
C49	FERTILE Subclass 1
C52	FERTILE Subclass 1
C67	FERTILE Subclass 1
A3	FERTILE Subclass 1
A4	FERTILE Subclass 1
Α9	FERTILE Subclass 1
A12	FERTILE Subclass 1
A14	FERTILE Subclass 1
A15	FERTILE Subclass 1
A31	FERTILE Subclass 1
A32	FERTILE Subclass 1
A33	FERTILE Subclass 1
A34	FERTILE Subclass 1
A38	FERTILE Subclass 1
A43	FERTILE Subclass 1
A44	FERTILE Subclass 1
A49	FERTILE Subclass 1
A50	FERTILE Subclass 1
A59	FERTILE Subclass 1 FERTILE Subclass 1
A61 C41	FERTILE Subclass 1 FERTILE Subclass 2
C65	FERTILE Subclass 2 FERTILE Subclass 2
C03	FERTILE Subclass 2 FERTILE Subclass 2
C44	FERTILE Subclass 2
C105	FERTILE Subclass 2
C19	FERTILE Subclass 2
C32	FERTILE Subclass 2
C97	FERTILE Subclass 2
C72	FERTILE Subclass 2
C42	FERTILE Subclass 2
C20	FERTILE Subclass 2
C79	FERTILE Subclass 2
C90	FERTILE Subclass 2
C5	FERTILE Subclass 2
A11	FERTILE Subclass 2
A26	FERTILE Subclass 2
A28	FERTILE Subclass 2
A39 A40	FERTILE Subclass 2 FERTILE Subclass 2
A40 A41	FERTILE Subclass 2 FERTILE Subclass 2
A41 A42	FERTILE Subclass 2
A42 A47	FERTILE Subclass 2
A56	FERTILE Subclass 2
A60	FERTILE Subclass 2
A17	FERTILE Subclass 3
A18	FERTILE Subclass 3
A20	FERTILE Subclass 3
A21	FERTILE Subclass 3 FERTILE Subclass 3
A23	FERTILE Subclass 3
A25	FERTILE Subclass 3
A2	COMBINED_INFERTILITY Subclass 1
A8	COMBINED_INFERTILITY Subclass 2
A13	COMBINED_INFERTILITY Subclass 3
A30	COMBINED_INFERTILITY Subclass 3 COMBINED INFERTILITY Subclass 4
A19 A27	COMBINED_INFERTILITY Subclass 4 COMBINED_INFERTILITY Subclass 4
A27 A29	COMBINED_INFERTILITY Subclass 5
A29 A35	COMBINED_INFERTILITY Subclass 5 COMBINED_INFERTILITY Subclass 5
HOO	COMPHAED IN FILLILL SUNCIOSS 3

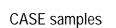
Samples with higher amounts of 'Repeats' resemble

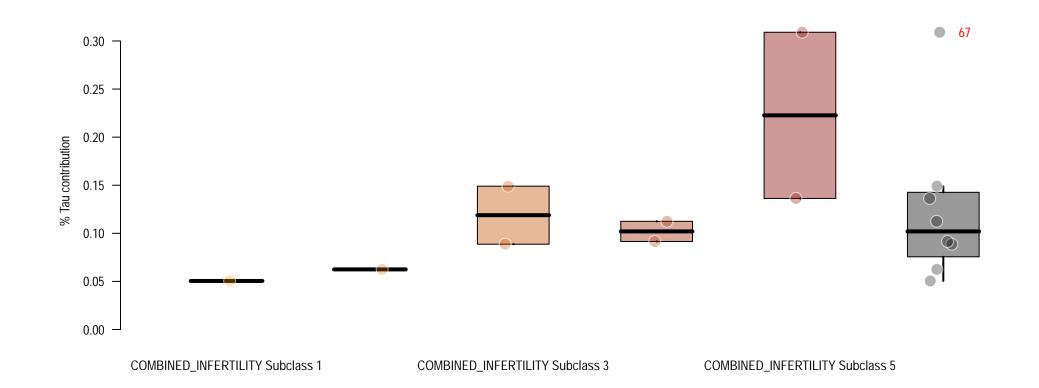


#### NSCA: Goodman and Kruskal's Tau contribution A higher Tau value per sample indicates more sample–specific signal.

CONTROL samples



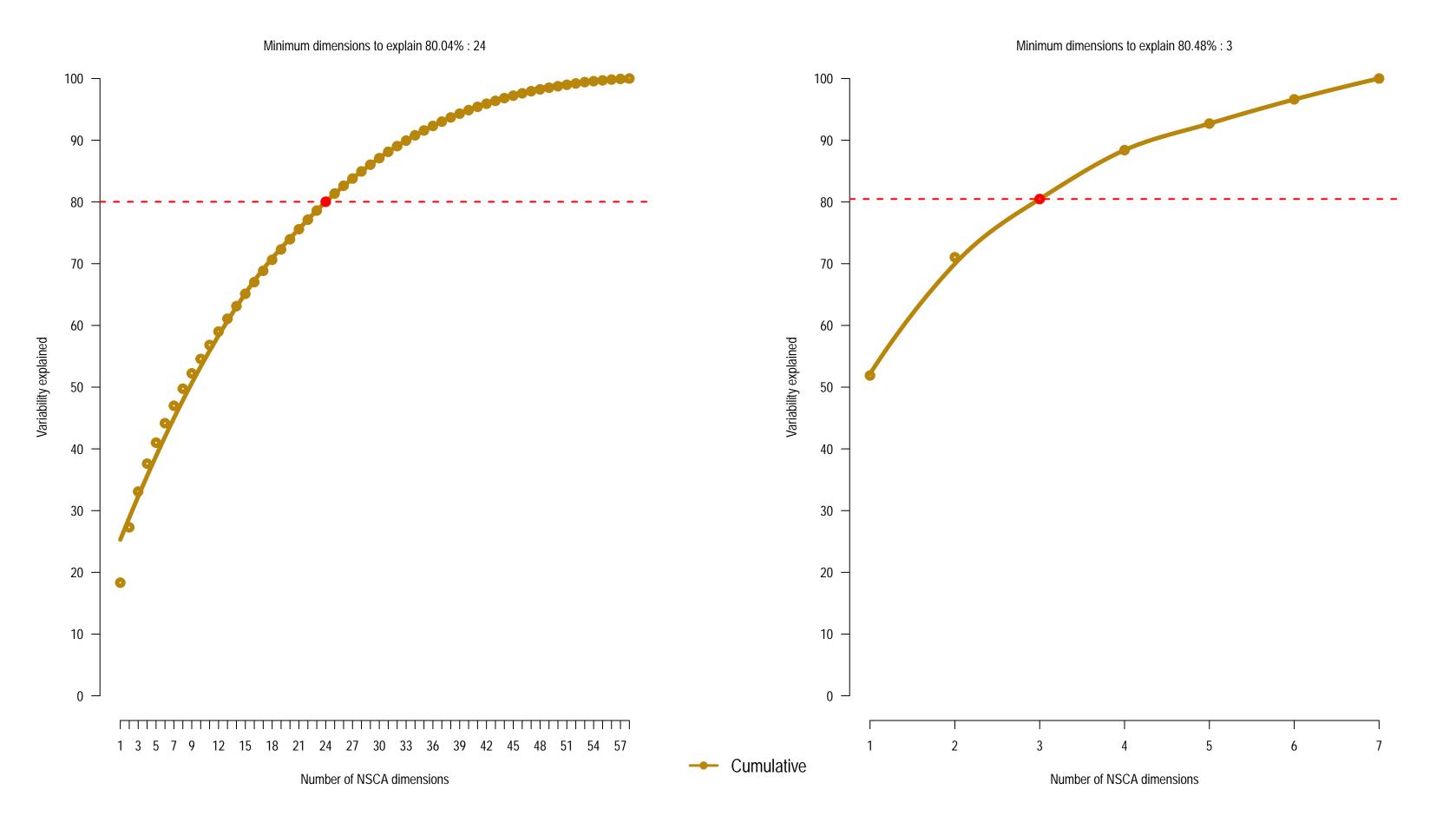




CONTROL NSCA
Tau 0.00013
C.Statistic 862752.22907
p.value 1

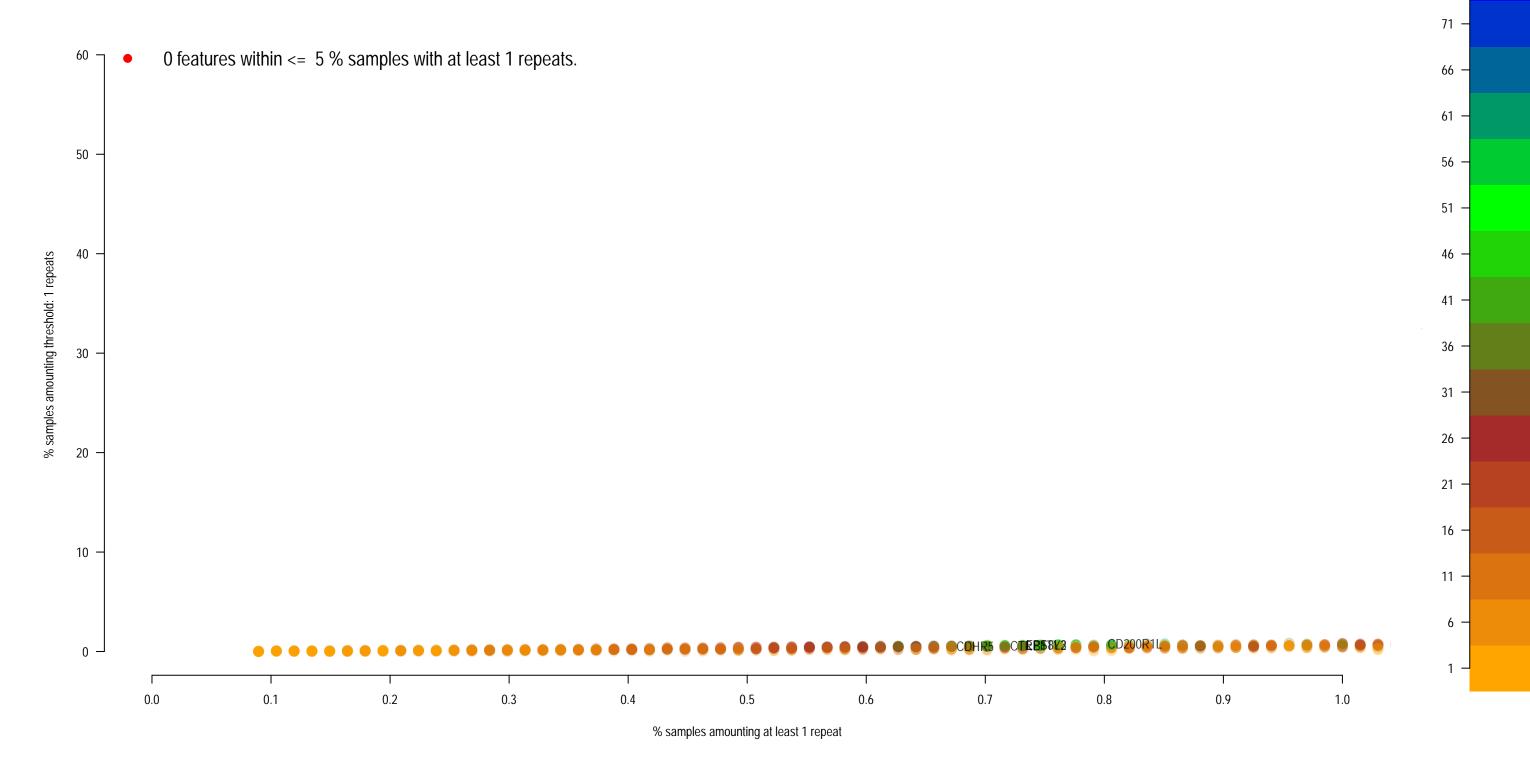
CASE NSCA
Tau 3e-05
C.Statistic 187206.82025
p.value 0

Control samples Case samples



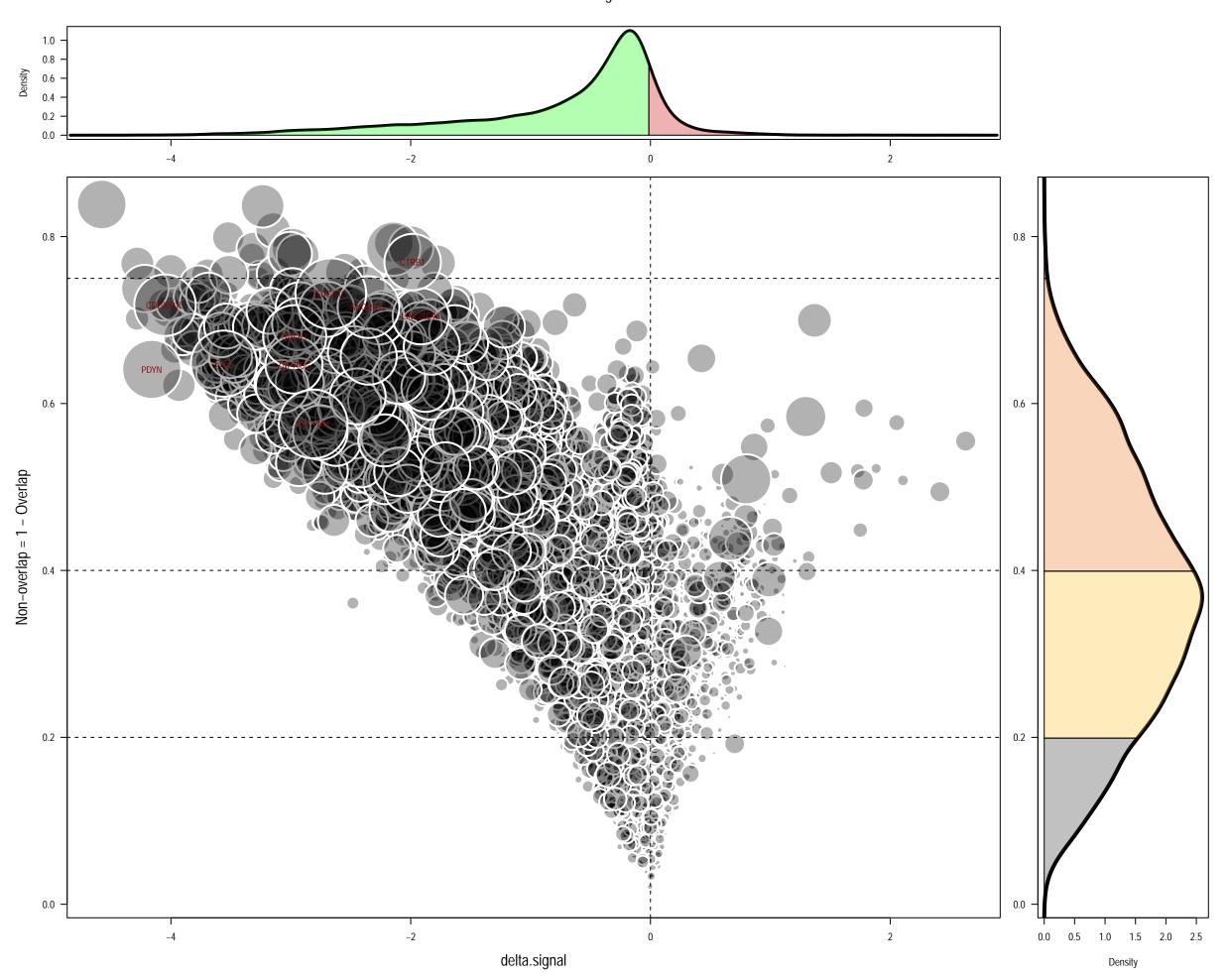
Ranking	ID	SYMBOL	UpDw	Profile	overlap.Ctrl.Case	Standard.Chi.Square	Repeats	Repeats.index	delta.signal	sd.Ctrl [	Dendrogram.group.Ctrl	h.Range.Ctrl	sd.Case D	endrogram.group.Case	h.Range.Case
1	EPS8L3	EPS8L3	DOWN	Complete	0.162	55.639	54	76.119	-4.577503	1.780	6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 -	34.373	2.348	2	52.379
2	LEFTY2	LEFTY2	DOWN	Majority	0.262	53.249	53	76.119	-4.217429	1.898	6	25.172	2.289	1	40.824
3	CD200R1L	CD200R1L	DOWN	Majority	0.282	69.188	63	83.582	-4.049806	1.712	5	32.482	2.262	5	40.078
J 1	CDHR5	CDHR5	DOWN		0.270	50.127	47	70.149	-3.687975	1.712	5	27.193	1.713	3 7	35.492
4				Majority							0			10	
5	CTRB1	CTRB1	DOWN	Majority	0.231	63.487	61	74.627	-1.984000	1.362	0	24.973	0.063	10	1.059
0	ECM2	ECM2		Majority	0.214	60.824	55	76.119	-2.145074	1.519	5	23.207	0.063	10	1.118
1	PTH1R	PTH1R		Majority	0.245	43.458	45	73.134	-3.517276	1.558	6	30.249	2.071	/	49.356
8	FPR2	FPR2		Majority	0.307	50.470	51	74.627	-3.536269	1.796	5	36.195	1.963	4	40.472
9	SH3GL3	SH3GL3	DOWN	Majority	0.257	42.114	42	71.642	-3.770617	1.673	5	32.081	2.576	7	62.133
10	DRD3	DRD3	DOWN	Complete	0.163	48.912	49	105.970	-3.235571	1.535	6	29.639	1.587	7	37.223
11	ADAM21	ADAM21	DOWN	Majority	0.304	47.094	47	155.224	-3.343560	1.635	5	30.369	2.382	7	52.410
12	EGFLAM-AS2	EGFLAM-AS2	DOWN	Majority	0.242	38.627	41	74.627	-4.003449	1.596	5	31.252	2.385	7	50.976
13	AADACL2	AADACL2	DOWN	Majority	0.289	51.844	50	77.612	-3.177100	1.589	5	31.924	1.887	7	42.854
14	C9orf50	C9orf50	DOWN	Majority	0.318	50.183	47	76.119	-3.581260	1.362	6	24.862	2.074	7	42.678
15	LINC02052	LINC02052	DOWN	Majority	0.284	40.026	42	71.642	-3.621102	1.535	5	29.457	2.255	7	46.301
16	SLCO1C1	SLCO1C1	DOWN	Majority	0.308	50.689	57	79.104	-3.294285	1.760	5	33.382	1.726	4	18.806
17	MGC27382	MGC27382		Majority	0.308	47.872	45	68.657	-3.230063	1.745	5	32.684	2.008	7	38.889
18	ZNF733P			Majority	0.313	58.016	54	70.149	-1.631233	1.340	5	23.992	0.063	10	1.085
19	LRRD1	LRRD1	DOWN	Majority	0.277	39.323	39	70.149	-3.778921	1.637	5	30.749	2.643	7	64.170
20	SAG			Majority	0.221	49.286	49	70.149	-3.006327	1.614	6	25.941	1.308	1	29.628
21	MEGF11	MEGF11	DOWN	Majority	0.291	45.411	44	77.612	-3.111937	1.429	5	28.312	1.876	7	39.580
22	KIF21B	KIF21B	DOWN	Majority	0.319	42.825	42	73.134	-3.903895	1.576	6	29.953	2.377	7	53.652
23	MUC16	MUC16				43.597		70.149	-3.826061	1.522	0 4		2.580	7	
				Majority	0.316		41				0	28.932		7	55.931
24	HNF4A		DOWN	Complete	0.192	39.700	42	67.164	-3.147837	1.494	0	30.036	1.540	/	39.182
25	ITPKA	ITPKA	DOWN	Majority	0.245	38.862	42	76.119	-3.140166	1.397	0	26.017	1.789	/	41.049
26	ADAM21P1	ADAM21P1	DOWN	Majority	0.283	53.820	51	77.612	-2.925938	1.656	6	31.490	2.000	4	35.423
27	CIMAP1D	CIMAP1D		Majority	0.281	36.936	38	70.149	-3.987086	1.483	6	26.261	2.515	/	59.146
28	ENAM			Majority	0.265	50.743	45	71.642	-2.987835	2.184	5	42.340	2.025	8	40.376
29	LINC00550	LINC00550	DOWN	Majority	0.301	38.717	39	70.149	-3.414049	1.791	5	35.340	2.102	1	51.147
30	TMEM215	TMEM215	DOWN	Majority	0.232	38.103	37	70.149	-4.280040	1.610	6	30.438	2.851	7	68.478
31	EML2-AS1			Majority	0.215	46.904	44	67.164	-2.984510	1.704	5	16.271	0.759	1	19.864
32	IL23R		DOWN	Majority	0.344	48.227	46	76.119	-3.503024	1.639	5	33.293	2.262	7	49.936
33	EFCAB3	EFCAB3	DOWN	Majority	0.223	48.184	45	65.672	-2.941114	1.725	5	36.913	1.795	8	41.411
34	EYA1	EYA1	DOWN	Majority	0.318	50.071	48	77.612	-3.007514	1.582	5	30.734	1.849	7	40.075
35	GRID1-AS1	GRID1-AS1	DOWN	Majority	0.343	47.661	45	73.134	-3.432254	1.766	5	33.464	2.387	7	50.062
36	C17orf78	C17orf78	DOWN	Majority	0.305	58.387	54	77.612	-2.940225	1.908	5	34.336	1.229	4	18.621
37	FUNDC2P2	NotAssigned	DOWN	Majority	0.272	39.321	37	71.642	-3.830907	1.532	6	30.192	2.495	7	59.083
38	KRTAP6-1	KRTAP6-1		Majority	0.327	47.569	43	61.194	-1.531117	1.284	6	22.929	0.063	10	1.103
39	ASB5		DOWN	Majority	0.332	46.207	47	77.612	-3.135545	1.587	5	30.667	1.777	7	34.874
40	E2F2		DOWN	Majority	0.352	74.345	67	85.075	-3.558268	1.478	6	28.805	2.095	4	34.055
41	PDYN		DOWN	Majority	0.359	66.304	52	79.104	-4.160735	1.524	6	31.137	2.976	1	64.609
42	SMLR1	SMLR1		Majority	0.320	70.846	60	77.612	-2.967972	1.604	6	31.065	1.435	4	14.025
43	LINC00494	LINC00494		Majority	0.246	36.250	36	68.657	-3.694684	1.701	5	33.998	2.556	7	65.539
44	RP1		DOWN	Majority	0.323	39.355	40	995.522	-3.076443	1.603	5	31.854	2.122	7	50.305
45	C6		DOWN	Majority	0.323	37.883	38	2565.672	-3.782214	1.742	J F	34.064	2.656	7	64.900
45	LINC00534	NotAssigned			0.313	44.432	44	74.627	-3.762214	1.742		25.298	1.625	ן ד	31.225
				Majority Majority				74.627	-2.926692 -3.191974	1.408	3			<i>I</i>	
47 40	AKNAD1	AKNAD1		Majority	0.309	37.689 25.127	38				) F	31.523	2.191	<i>I</i>	54.604 67.517
48	STAB2	STAB2		Majority	0.290	35.137	36	70.149	-4.030963	1.550	5	30.248	2.740	1	67.517
49	TNFAIP8L1	TNFAIP8L1		Majority	0.297	38.864	39	71.642	-3.082499	1.284	6	26.374	1.863	]	43.827
50	KNCN	KNUN	DOWN	Majority	0.214	37.058	37	62.687	-3.315403	1.585	6	30.305	2.178	I	51.769

Ranking	ID	SYMBOL	UpDw	Profile	overlap.Ctrl.Case S	tandard.Chi.Square	Repeats	Repeats.index	delta.signal	sd.Ctrl D	Dendrogram.group.Ctrl	h.Range.Ctrl	sd.Case D	endrogram.group.Case	h.Range.Case
1	TRIM6-TRIM34	TRIM6-TRIM34	DOWN	Minority	0.733	3.429	1	8.955	-0.3611862	0.416	9	4.882	0.497	10	10.159
2	SELENOO			Minority	0.633	4.827	1	8.955	-0.3606305	0.356	2	8.183	0.256	6	5.761
3	FNTB		DOWN	Minority	0.726	3.942	1	17.910	-0.2184900	0.249	9	2.562	0.211	10	4.861
Ā	NPM2	NPM2	DOWN	Minority	0.690	4.179	1	8.955	-0.3541166	0.353	3	3.558	0.292	8	6.098
5	PCDHGB5	PCDHGB5	DOWN	Minority	0.504	8.623	1	26.866	-0.5265874	0.335	2	6.870	0.266	3	7.239
6	NEFL		DOWN	Minority	0.671	4.443	1	8.955	-0.1163577	1.412	3	11.225	1.622	1	54.800
7	EPB42	EPB42	DOWN	Minority	0.625	3.821	1	8.955	-0.7757980	1.611	5 5	30.345	2.101	7	65.696
8	HELB	HELB	DOWN	Minority	0.696	4.179	1	8.955	-0.1790877	0.497	8	4.209	0.911	10	25.491
9	CKMT1A	CKMT1A	UP	Minority	0.748	4.058	1	8.955	0.2707046	0.605	3	4.480	0.419	10	14.553
10	GLG1	GLG1	DOWN	Minority	0.633	3.749	1	8.955	-0.3192479	0.305	5	4.871	0.145	2	2.441
11	OR4Q3	OR4Q3	DOWN	Minority	0.668	3.903	1	8.955	-0.5388626	1.248	7	14.331	1.063	4	24.467
12	ADD3-AS1	ADD3-AS1	DOWN	Minority	0.722	5.600	2	14.925	-0.5496349	0.482	10	6.330	0.968	10	21.848
13	TNS4		DOWN	Minority	0.686	4.247	1	8.955	0.2340962	0.916	1	3.107	0.768	3	22.583
14	CACFD1	CACFD1	DOWN	Minority	0.641	4.619	1	8.955	-0.3532659	0.393	2	5.367	0.266	2	8.086
15	CYP3A7-CYP3A51P	CYP3A7-CYP3A51P	DOWN	Minority	0.696	4.057	1	8.955	-0.4318003	0.754	7	10.554	0.777	4	13.965
16	MIR3125		DOWN	Minority	0.723	6.491	2	14.925	-0.4652587	1.446	3	8.656	2.100	9	47.385
17	PTGDS		DOWN	Minority	0.640	4.473	1	8.955	-0.6791985	0.669	2	14.221	0.696	1	21.485
18	COL6A2	COL6A2	UP	Minority	0.631	4.471	1	8.955	0.1032206	0.500	1	6.583	0.889	2	21.466
19	ZNF35	ZNF35	DOWN	Minority	0.705	3.716	1	158.209	-0.4117756	0.469	7	4.283	0.464	1	15.173
20	SGTA	SGTA	DOWN	Minority	0.733	3.785	1	8.955	-0.2054327	0.218	2	5.387	0.141	3	2.557
21	METTL13	METTL13	DOWN	Minority	0.748	4.376	1	8.955	-0.2442967	0.177	9	0.923	0.330	10	7.456
22	KBTBD4	KBTBD4	DOWN	Minority	0.725	5.841	2		-0.3495842	0.362	10	2.879	0.566	10	13.120
23	MDN1	MDN1	DOWN	Minority	0.744	5.194	2	22.388	-0.3491822	0.424	9	1.511	0.454	10	10.641
24	ADAP1	ADAP1	DOWN	Minority	0.585	5.039	1	8.955	-0.1077476	0.707	4	12.623	0.820	2	21.624
25	SQLE		DOWN	Minority	0.685	6.012	2	13.433	-0.3061617	0.311	10	4.563	0.379	9	10.428
26	LBX2-AS1	LBX2-AS1	DOWN	Minority	0.663	4.570	1	8.955	0.2952262	1.340	1	17.261	0.804	1	20.003
27	RER1	RER1	DOWN	Minority	0.712	4.964	1	8.955	-0.2002831	0.237	2	3.002	0.140	9	3.708
28	LYST	LYST	DOWN	Minority	0.669	7.219	3	19.403	-0.2795746	0.406	10	4.675	0.206	4	4.500
29	MIR4638	MIR4638	UP	Minority	0.641	5.265	1	8.955	0.6880417	0.724	3	3.422	1.154	1	23.700
30	FAAHP1	NotAssigned	DOWN	Minority	0.665	4.292	1	8.955	-0.4702503	0.679	2	6.978	0.729	2	20.058
31	HNRNPUL2-BSCL2	HNRNPUL2-BSCL2	DOWN	Minority	0.581	5.350	2	14.925	-0.4512426	0.329	2	6.240	0.279	6	6.940
32	KCNAB3	KCNAB3	DOWN	Minority	0.605	4.858	1	8.955	-0.1839179	1.164	4	12.979	1.499	2	42.262
33	ZNF774	ZNF774	DOWN	Minority	0.712	7.023	3	17.910	-0.3388167	0.489	5	5.934	0.313	1	7.485
34	LINC02389	LINC02389	DOWN	Minority	0.721	4.082	1	8.955	-0.2050084	0.950	7	9.303	0.662	4	11.709
35	QTRT2	QTRT2	DOWN	Minority	0.703	7.079	3	19.403	-0.3344201	0.313	9	2.530	0.480	10	12.109
36	IWS1	IWS1	DOWN	Minority	0.722	7.221	3	17.910	-0.3215296	0.305	9	1.534	0.441	10	9.450
37	VEPH1		DOWN		0.665	4.482	1		-0.4326615	0.915	10	10.513	1.048	9	26.247
38	NRSN2		DOWN		0.474	8.826	4	20.896	-0.5733530	0.364	2	7.923	0.241	8	4.163
39	AQP10		DOWN		0.645	4.637	1		-0.9124211	1.064	3	9.131	1.511	9	41.198
40	FNTB		DOWN		0.726	3.942	1	17.910		0.249	9	2.562	0.211	10	4.861
41	ADCY4		DOWN		0.596	5.921	2		-0.4474828	1.311	1	8.993	0.729	4	25.089
42	SPEF1		DOWN		0.653	4.769	1	8.955		0.940	5	18.705	1.004	2	31.392
43	PDCD6P1	NotAssigned			0.690	5.162	1	8.955	-0.3134710	0.432	7	1.376	0.353	4	9.698
44	CIAPIN1	CIAPIN1			0.674	6.417	1	8.955	-0.3303669	0.394	5	5.087	0.283	6	9.175
45	RRBP1		DOWN		0.639	6.176	1	8.955	-0.4175136	0.382	3	4.147	0.321	3	10.774
46	FNTB		DOWN		0.726	3.942	1	17.910	-0.2184900	0.249	9	2.562	0.211	10	4.861
47	TAS2R14	TAS2R14			0.673	5.087	1	8.955	-0.3293176	0.684	3	0.739	0.416	3	10.444
48	TAS2R14	TAS2R14			0.673	5.087	1	8.955	-0.3293176	0.684	3	0.739	0.416	3	10.444
49	TAS2R14	TAS2R14			0.673	5.087	1	8.955	-0.3293176	0.684	3	0.739	0.416	3	10.444
50	L3MBTL1	L3MBTL1			0.645	8.381	3	20.896	-0.3010312		7	4.594	0.276	2	6.863
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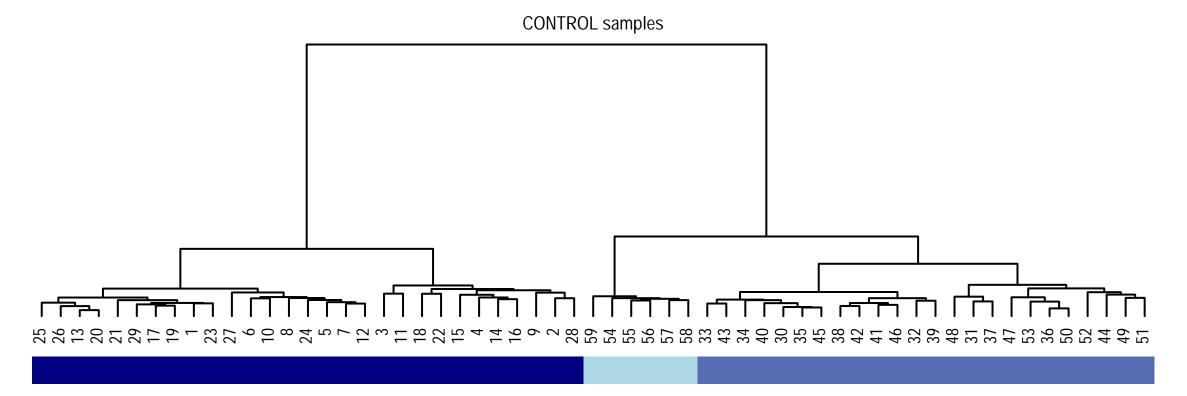
## RDA: overlap Signal VS delta Signal plot

Circle size corresponds to relative amount of 'Standard.Chi.Square' per feature. Higher circles indicate more DIFFERENTIAL SIGNAL between both classes.

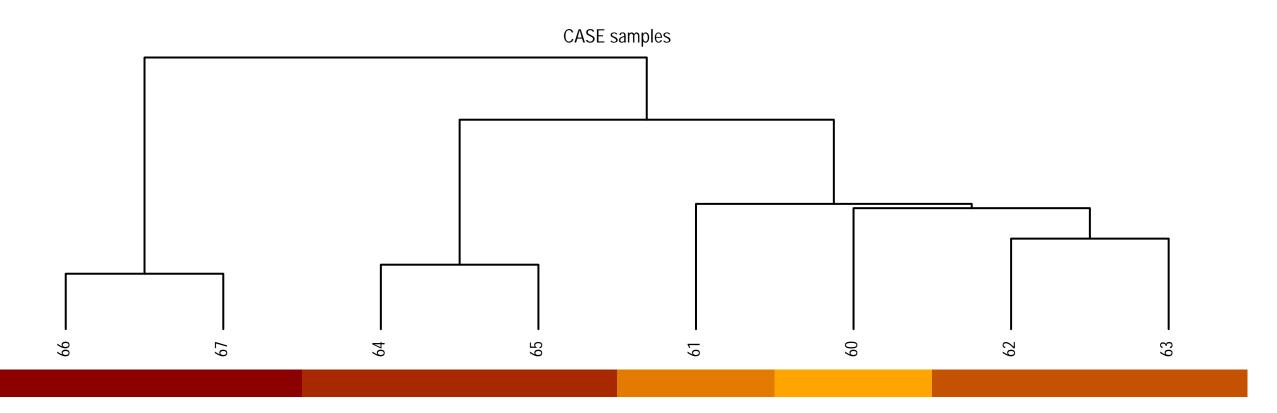


- ID provided by user
- A Top-15 features based on Standard.Chi.Square
- Thresholds among different feature profiles
- COMPLETE features
- MAJORITY features
- MINORITY features
- MIXED features

NSCA: Subclasses of samples found based on 'h' statistic



Hubber's gamma coefficient for cutting dendrogram: 0.675



Hubber's gamma coefficient for cutting dendrogram: 0.667

## Subclasses of samples found

- FERTILE Subclass 1
- FERTILE Subclass 2
- FERTILE Subclass 3
- COMBINED\_INFERTILITY Subclass 1
- COMBINED\_INFERTILITY Subclass 2
- COMBINED\_INFERTILITY Subclass 3
- COMBINED\_INFERTILITY Subclass 4
- COMBINED\_INFERTILITY Subclass 5

# Mean 'h' statistic per subclass within CONTROL samples

Top 50 discriminant features among subclasses found by DECO algorithm.

ID	CVAADOL		D. J. L. C. 14 O. J.	L C 14 OL 1	D	I- C-10 OL-1	Dealth Cala Old	I- C-12 OL-1	l. D Old	D d Old	Decides and a Old
ID 00103	SYMBOL	Standard.Chi.Square	Ranking.Scl1.Ctrl	h.Scl1.Ctrl	Ranking.Scl2.Ctrl	h.Scl2.Ctrl	Ranking.Scl3.Ctrl	h.Scl3.Ctrl	h.Range.Ctrl	Dendrogram.group.Ctrl	Dendrogram.order.Ctrl
OR1D2	OR1D2	25.63440	15	-21.443619	400	18.677682	/	29.706646	51.15027	/	9773
VN1R2	VN1R2	15.92056	166	-18.292750	2720	14.155804	4	31.241131	49.53388	/	9793
TEX50	TEX50	26.03251	/	-22.832891	37	21.395650	12	26.358626	49.19152	/	9951
MC5R	MC5R	20.39560	2575	-23.770907	12	22.708469	16	24.995986	48.76689	/	9839
ADAM3A	ADAM3A	17.36214	2575	-12.175960	6538	5.702659	750	35.770907	47.94687	l 7	114
BNIP5	BNIP5	17.69787	4	-23.122735	I	24.632318	752	12.696108	47.75505	/	9983
ADORA3	ADORA3	29.19932	3	-23.680133	11150	24.041080	99	19.545352	47.72121	/	9845
SNORA61	SNORA61	12.67233	4069	-9.138548	11153	1.590897	15	37.516446	46.65499	<i>[</i>	9412
HSFY1P1	HSFY1P1	38.36617	16	-21.321723	96	20.527740	15	25.039163	46.36089	5	4211
NAV2-AS5	NAV2-AS5	32.56324	6	-22.901505	6	23.265143	103	19.258250	46.16665	/	9841
C10orf120	C10orf120	26.14963	5	-22.995392	13	22.691085	120	18.686473	45.68648	5	4536
SLC38A8	SLC38A8	21.77338	4438	-8.411849	735	17.713287	8	-27.334367	45.04765	6	8162
SPATA31D1	SPATA31D1	23.95767	10	-21.827966	54	21.055158	28	23.124438	44.95240	/	9961
H1-9P		14.14228	20	-20.906553	5	23.464046	3782	7.658666	44.37060	/	9929
PCNAP1	TDV5 404	24.48777	48	-20.221536	316	19.070615	20	24.081683	44.30322	/	9946
TBX5-AS1	TBX5-AS1	16.79828	12	-21.547387	16	22.322659	264	16.134513	43.87005	/	9844
SRGAP3-AS3	SRGAP3-AS3	28.42245	11	-21.596974	17	22.223251	280	15.990196	43.82022	/	9795
CRTAM	CRTAM	30.89938	8	-22.021418	23	21.755184	109	19.097262	43.77660	<u>/</u>	9852
RNF148	RNF148	36.29554	14	-21.502688	58	20.982619	38	22.200069	43.70276	/	9945
OR4M1	OR4M1	15.92426	65	-19.806277	590	18.087851	23	23.850473	43.65675	/	9775
LINC02135	LINC02135	25.30954	9	-21.944389	30	21.551265	85	19.998349	43.49565		9765
CD180	CD180	23.07768	57	-19.994321	/	23.220729	5628	6.253087	43.21505	5	4139
NDNF	NDNF	32.66437	33	-20.532068	14	22.450703	1097	11.443432	42.98277	<u>5</u>	4143
LINC01743	LINC01743	29.28290	42	-20.390343	236	19.474414	35	22.529356	42.91970	7	9940
CTAGE11P	CTAGE11P	15.95558	13	-21.515194	48	21.197606	97	19.562666	42.71280	6	6777
SPATA31C2	SPATA31C2	16.57237	24	-20.738050	20	21.906635	569	13.610563	42.64469	<u>/</u>	9959
LINC00442	LINC00442	20.76218	18	-21.215447	39	21.363118	142	18.049996	42.57856		9944
CCL14	CCL14	28.40743	/2	-19.629915	11	22.798724	9008	3.990558	42.42864	<u>5</u>	4447
CALHM5	CALHM5	30.21190	1/	-21.246229	50	21.164265	81	20.156575	42.41049	<u>/</u>	9847
SPATA31C1	SPATA31C1	14.45988	21	-20.849313	31	21.549636	365	15.084993	42.39895	7	9960
ENAM	ENAM	50.74311	79	-19.515007	10	22.825230	1775	10.021983	42.34024	<u>5</u>	4212
OR6C2	OR6C2	44.48687	173	-18.241145	1244	16.768536	21	24.069928	42.31107	7	9776
TBC1D28	TBC1D28	18.61453	25	-20.721542	35	21.508533	377	14.979694	42.23008	7	9994
OR2H1	OR2H1	30.21611	31	-20.581589	26	21.585736	175	17.361228	42.16732	7	9936
RAB3C	RAB3C	17.19287	32	-20.567913	27	21.563689	563	13.657935	42.13160	7	9860
CCL15-CCL14		30.53091	96	-19.276525	9	22.840988	10103	3.276173	42.11751	5	4446
ABCB1	ABCB1	19.58429	30	-20.642200	38	21.394372	386	14.928598	42.03657	7	9859
ELOA2	ELOA2	25.98313	19	-21.161795	67	20.873065	92	19.700869	42.03486	7	9993
NIPAL4	NIPAL4	15.64297	61	-19.930733	18	22.094316	3446	7.957345	42.02505	7	9637
MRGPRX3	MRGPRX3	16.89026	22	-20.840337	151	20.039556	57	21.107065	41.94740	7	9891
GARIN3	GARIN3	24.49427	56	-20.009173	19	21.910859	2162	9.448897	41.92003	5	4559
SNORA18	SNORA18	11.60253	4365	-8.548482	10387	1.882327	3	33.358599	41.90708	8	12705
LINC01141		22.12453	29	-20.650932	52	21.107506	277	16.008692	41.75844	7	9943
LINC00544		33.65412	51	-20.199931	33	21.533962	954	11.901553	41.73389	7	9862
TMCO2	TMCO2	28.01631	40	-20.407626	217	19.604336	53	21.264034	41.67166	7	9947
PMP2	PMP2	19.28398	247	-17.685842	2091	15.405730	22	23.932900	41.61874	7	9818
IL10RA	IL10RA	15.53753	105	-19.188444	15	22.406045	9439	3.704101	41.59449	1	1481
SUMO1P1		51.83410	27	-20.685667	65	20.893958	66	20.737862	41.57962	7	9770
GOLGA6L22	GOLGA6L22	24.13694	41	-20.391790	243	19.450333	55	21.180589	41.57238	5	4003
PGLYRP4	PGLYRP4	14.15362	2581	-12.167280	152	20.037447	50	-21.526657	41.56410	6	6878

# Mean 'h' statistic per subclass within CASE samples

Top 50 discriminant features among subclasses found by DECO algorithm.

ID	SYMBOL	Standard.Chi.Square	Ranking.Scl1.Case	h.Scl1.Case	Ranking.Scl2.Case	h.Scl2.Case	Ranking.Scl3.Case	h.Scl3.Case	Ranking.Scl4.Case	h.Scl4.Case	Ranking.ScI5.Case	h.Scl5.Case	h.Range.Case	Dendrogram.group.Case	Dendrogram.orde
H2BC1	H2BC1	11.472773	1	59.9046102	5369	5.8019464	4609	8.86270673	92	26.781403	1	-66.64455	126.54916	7	
TUBA3C	TUBA3C	15.862177	8	45.5230430	13571	0.7656900	2607	12.17601184	393	22.025782	13	-58.06596	103.58900	7	
TKTL2	TKTL2	18.775634	6	46.2314604	4538	6.5173528	11767	2.62326935	70	27.329181	15	-57.29388	103.52534	7	
CCDC42	CCDC42	18.119231	4	48.1241755	1379	-13.2023173	8933	5.04144185	172	25.019487	43	-52.21012	100.33430	7	
SPATA16	SPATA16	17.639668	29	40.8555698	4372	-6.6746786	4257	9.27109475	73	27.316021	11	-58.34852	99.20409	7	
H2AC1	H2AC1	13.019760	2	51.0030974	9346	-3.1973998	5157	8.28125337	1256	16.828030	109	-48.14100	99.14410	7	
SPATA31C1	SPATA31C1	14.459882	3839	7.5203516	989	15.2646694	1267	17.77458486	6	33.567117	2	-63.60390	97.17102	7	
LYPD4	LYPD4	18.684883	128	31.8843173	3197	8.2227349	3506	10.25764773	5	34.199138	3	-62.60397	96.80311	7	
RBMXL2	RBMXL2	18.790185	35	39.8932524	12663	-1.3270090	3079	11.03665153	242	23.681727	16	-55.56900	95.46225	7	
SPATA8	SPATA8	16.168055	22	41.9900930	11992	-1.7431671	7829	5.97093823	127	25.999311	35	-52.96875	94.95884	7	
SPSB4	SPSB4	15.584791	30	40.8503197	7241	4.4589112	2691	11.91411337	574	20.540847	25	-53.61401	94.46433	7	
HDGFL1	HDGFL1	14.315702	39	39.5390855	7925	4.0571971	1394	17.08757200	1121	17.328392	27	-53.36168	92.90077	7	
WDR87	WDR87	20.351952	15	43.2618016	5812	-5.4519077	9960	4.18907976	281	23.184232	77	-49.60259	92.86439	7	
PPP3R2	PPP3R2	18.888010	52	38.3278491	3261	-8.1196265	10892	3.40285803	45	28.286925	60	-50.85651	89.18436	7	
RSPH6A	RSPH6A	17.806441	17	42.8106305	4586	-6.4783572	3618	10.07652018	1446	16.048554	191	-45.71303	88.52366	7	
OR7E156P		24.029469	1969	-12.4465566	841	16.2474134	6662	6.93907007	2	35.323377	32	-53.14530	88.46868	7	
ACTL7B	ACTL7B	12.754018	420	23.8982639	1303	13.5736703	187	28.23882621	1773	15.004821	5	-60.17341	88.41224	7	
PAQR9	PAQR9	23.726081	2310	11.3158322	934	15.5291443	1502	16.55947508	77	27.210448	4	-60.92464	88.13508	7	
MROH2B	MROH2B	22.048472	107	33.0385065	8557	3.6856714	10356	3.85896928	63	27.650306	21	-54.54374	87.58224	7	
LDHC	LDHC	13.258655	44	38.8545371	3896	7.2597401	11703	-2.67333231	41	28.453674	101	-48.64741	87.50195	7	
GTSF1	GTSF1	22.350389	1538	14.4229375	6373	5.0606407	807	20.79615486	35	28.802060	10	-58.57189	87.37395	7	
IQCF4P	IQCF4P	18.538583	3661	7.8446712	909	15.7386288	1347	17.33269699	42	28.377479	9	-58.83959	87.21707	7	
ZPBP2	ZPBP2	22.355179	59	37.5054677	14120	0.4436583	11695	-2.67955606	49	28.171818	82	-49.55005	87.05552	7	
PRKACG	PRKACG	16.961905	71	35.8117332	2713	9.1137399	2392	12.84677501	1229	16.941647	59	-50.96369	86.77542	7	
MORC1	MORC1	27.017490	1867	12.9159167	885	15.9548385	1930	14.62273016	46	28.282820	12	-58.32338	86.60620	7	
CPA5	CPA5	27.233889	2979	9.4031456	697	17.3086049	4417	9.09992670	96	26.727601	8	-59.39218	86.11978	/	
GK2	GK2	16.699817	117	32.6278480	5673	5.5605450	2789	11.65926220	252	23.530800	29	-53.20028	85.82813	/	
ADAM30	ADAM30	31.073108	11	44.6551064	1613	-12.2036673	2298	-13.13925660	57	27.877506	377	-41.15365	85.80875	/	
SMD2-AS1	CSMD2-AS1	23.523612	3921	7.3658564	2688	9.1559689	1252	17.88433073	50	28.080475	14	-57.64400	85.72447	/	
LYL1	LYL1	19.048280	428	23.6931547	3104	8.4085433	789	20.96008546	149	25.492497	6	-60.16538	85.65788	/	
CHST13	CHST13	8.360021	34	40.0120120	3165	-8.2943522	964	19.59799279	3483	11.585917	197	-45.63198	85.64400	/	
TEX26	TEX26	26.860645	13991	-0.4525326	2254	10.1870274	7399	6.31739146	13	31.199611	22	-54.39437	85.59398	/	
LINC00343	LINC00343	15.015199	88	34.2954016	800	-16.5190712	1585	16.11826845	207	24.321885	64	-50.65078	84.94618	/	
/IR663AHG	MIR663AHG	23.882750	760	19.5168947	1839	11.3561682	7169	6.51713695	19	30.023311	20	-54.63775	84.66106	/	
ADAM3A	ADAM3A	17.362141	483	22.9501401	1803	11.4628500	12502	-2.08297143	202	35.722223	97	-48.83635	84.55857	/	
ZDHHC19	ZDHHC19	26.151062	5335	5.4962389	1417	12.9996547	787 1020	20.97588742	203	24.388766	/ 07	-59.69450	84.08327	1	
LINC00905	LINC00905	13.934723	76	34.8145923	8221	-3.8673166	1928	14.62425355	496	21.107912	87	-49.18164	83.99623	<i>1</i>	
LINC01304 SPATA22	LINC01304 SPATA22	26.418888	2480	10.8868475 32.7097205	1262	13.7495095	2493 9421	12.49296776 4.62051240	18	30.088404 29.085582	26	-53.48543 -50.78806	83.57383 83.49779	<i>1</i>	
	SPATAZZ	19.239932	115		9328	-3.2076829			30		62			7	
LINC01096	FOVC1	16.119664	3 I 7 E	38.3290298	12468 11747	-1.4420964	11166	3.16866112	261	23.405730	226	-44.90336	83.23239	7	
FOXG1 PAPOLB	FOXG1 PAPOLB	9.004897 24.173770	75 204	35.2687256 29.0306096		-1.8915507 1.7129435	289 7906	26.13984132	8320	6.524937 32.774039	118 67	-47.92772 50.41075	83.19645	7	
FAM228A	FAM228A	11.927716	204	37.7001057	12044	-45.3659374	3379	-5.91015954 10.47892281	3503	11.562091	2311	-50.41075 -17.29188	83.18479 83.06604	7	
H1-6	H1-6	18.292644	57 13	44.4211559	10949	2.2878328	14963	-0.02498147	2254	13.806146	504	-17.29100 -38.60431	83.02547	7	
RNF113B	RNF113B	16.226698	13 46	38.6513851	11813	-1.8510875	6107	7.43829103		17.905150		-38.60431 -44.31052	82.96191	<i>I</i>	
CHCT1	CHCT1	15.160614		33.1582138	10361	2.6077426	2340	13.02935137	987 858	18.647437	251 79	-44.31052 -49.57045	82.72866	7	
ART5	ART5	8.507662	105 31	40.6752214	1931	-11.0736382	2206	13.51958150	858 1445	16.053174	340	-49.57045 -41.91128	82.58650	7	
GALNT15	GALNT15	12.145204	62	36.7392285	6443	-5.0065679	4992	8.44392600	312	22.822232	198	-41.91126 -45.62586	82.36509	7	
SPRR4	SPRR4	26.715274	10889	1.9932465	5359	5.8085745	4992	9.58898247	53	28.064676		-43.02360 -53.73005	81.79473	7	
CETN1	CETN1	22.023720	81	34.5457919	12373	-1.4959533	14060	-0.68145499	126	26.003633	24 137	-33.73003 -47.08062	81.62641	7	
CETIVI	CETIVI	22.023720	01	34.3437719	123/3	-1.4707000	14000	-0.00143479	120	20.003033	13/	-47.00002	01.02041	,	