

Overview
DECO analysis report

RDA information

| | |
|--------------------------|--------|
| Contrast design: | Binary |
| Number of samples: | 69 |
| Total iterations: | 1000 |
| Positive DE iterations: | 368 |
| DE features: | 6709 |
| Minimum repeats: | 0 |
| LIMMA q.value threshold: | 0.05 |
| RDA resampling size: | 3 |

NSCA information

| | | |
|-------------------------------|-----------------|--------------|
| | Control samples | Case samples |
| Variability explained by NSCA | 80.425 | 85.533 |
| NSCA C–statistic p.value | 0 | 0 |
| Huber's gamma | 0.622 | 0.716 |

Feature ranking information

| Ranking | ID | SYMBOL | UpDw | Profile |
|---------|-----------|-----------|-------|----------|
| 1 | SERF1A | SERF1A | UP | Majority |
| 2 | OR14A16 | OR14A16 | DOWN | Minority |
| 3 | NCR3 | NCR3 | DOWN | Majority |
| 4 | MUCL3 | MUCL3 | DOWN | Minority |
| 5 | OR10A2 | OR10A2 | DOWN | Minority |
| 6 | TCHHL1 | TCHHL1 | DOWN | Majority |
| 7 | CCL5 | CCL5 | DOWN | Minority |
| 8 | HBA1 | HBA1 | UP | Minority |
| 9 | NGB | NGB | MIXED | Minority |
| 10 | LINC00273 | LINC00273 | UP | Minority |

Subclass information

| | Samples | FeaturesUP | FeaturesDOWN | average.hStat.perc95 | Binary | isRelevant |
|-------------------------------|---------|------------|--------------|----------------------|--------|------------|
| FERTILE Subclass 1 | 17 | 1369 | 88 | 39.829691 | 0 | TRUE |
| FERTILE Subclass 2 | 9 | 56 | 48 | 35.851857 | 0 | TRUE |
| FERTILE Subclass 3 | 17 | 2646 | 128 | 36.708833 | 0 | TRUE |
| FERTILE Subclass 4 | 8 | 120 | 44 | 41.015318 | 0 | TRUE |
| FERTILE Subclass 5 | 5 | 337 | 174 | 34.383123 | 0 | TRUE |
| FERTILE Subclass 6 | 3 | 1167 | 532 | 70.935578 | 0 | TRUE |
| SIMPLE_INFERTILITY Subclass 1 | 6 | 145 | 169 | 4.194545 | 1 | TRUE |
| SIMPLE_INFERTILITY Subclass 2 | 4 | 1065 | 5330 | 10.619193 | 1 | TRUE |

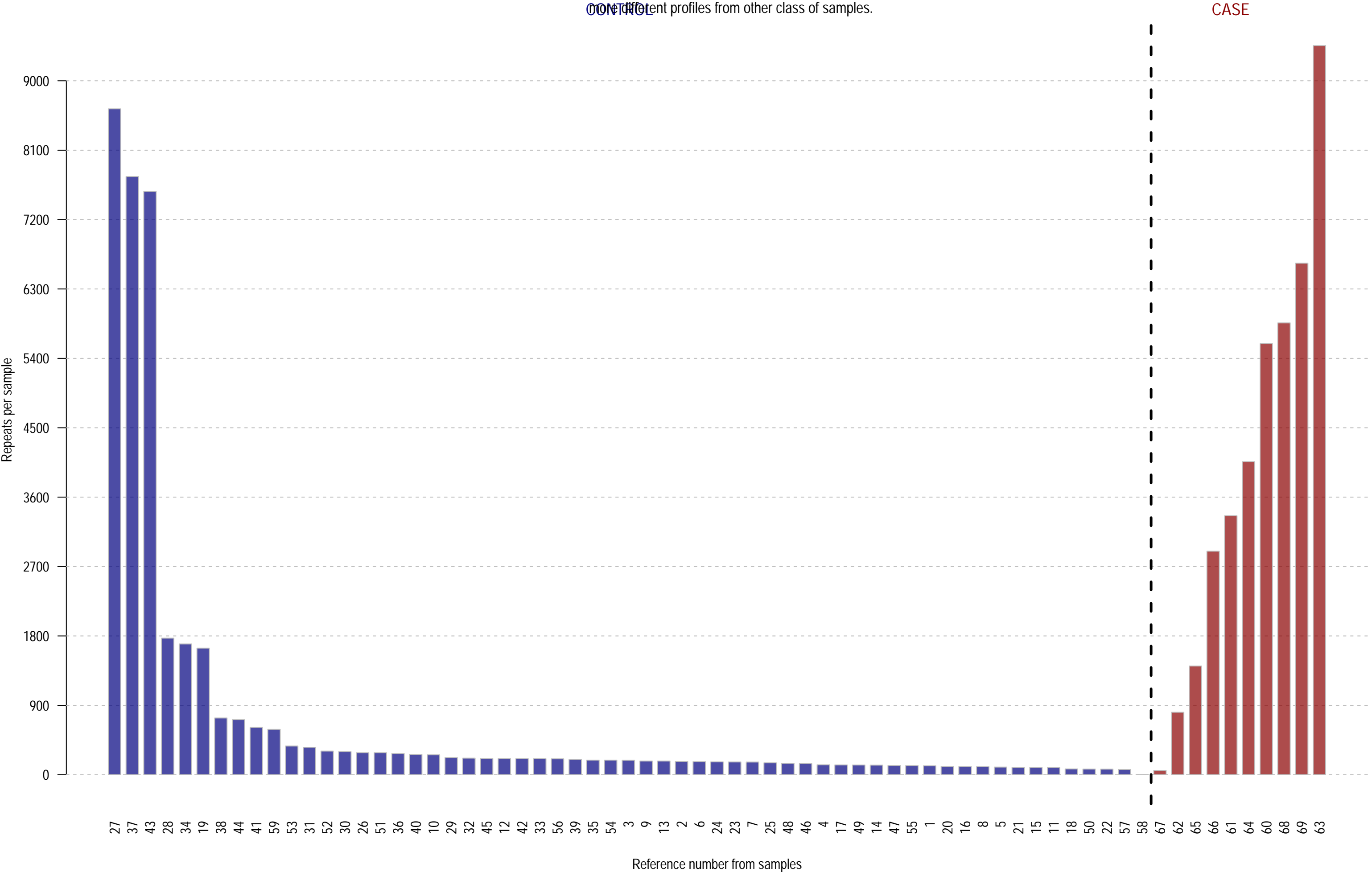
Non-relevant subclasses are grey-colored

| | Samples | Subclass |
|----|---------|-------------------------------|
| 1 | C56 | FERTILE Subclass 1 |
| 2 | C39 | FERTILE Subclass 1 |
| 3 | C54 | FERTILE Subclass 1 |
| 4 | C31 | FERTILE Subclass 1 |
| 5 | C68 | FERTILE Subclass 1 |
| 6 | C49 | FERTILE Subclass 1 |
| 7 | C67 | FERTILE Subclass 1 |
| 8 | A3 | FERTILE Subclass 1 |
| 9 | A14 | FERTILE Subclass 1 |
| 10 | A31 | FERTILE Subclass 1 |
| 11 | A32 | FERTILE Subclass 1 |
| 12 | A33 | FERTILE Subclass 1 |
| 13 | A38 | FERTILE Subclass 1 |
| 14 | A43 | FERTILE Subclass 1 |
| 15 | A44 | FERTILE Subclass 1 |
| 16 | A49 | FERTILE Subclass 1 |
| 17 | A61 | FERTILE Subclass 1 |
| 18 | C6 | FERTILE Subclass 2 |
| 19 | C100 | FERTILE Subclass 2 |
| 20 | C84 | FERTILE Subclass 2 |
| 21 | C13 | FERTILE Subclass 2 |
| 22 | C52 | FERTILE Subclass 2 |
| 23 | A4 | FERTILE Subclass 2 |
| 24 | A9 | FERTILE Subclass 2 |
| 25 | A12 | FERTILE Subclass 2 |
| 26 | A15 | FERTILE Subclass 2 |
| 27 | C41 | FERTILE Subclass 3 |
| 28 | C2 | FERTILE Subclass 3 |
| 29 | C44 | FERTILE Subclass 3 |
| 30 | C105 | FERTILE Subclass 3 |
| 31 | C19 | FERTILE Subclass 3 |
| 32 | C32 | FERTILE Subclass 3 |
| 33 | C72 | FERTILE Subclass 3 |
| 34 | C42 | FERTILE Subclass 3 |
| 35 | C20 | FERTILE Subclass 3 |
| 36 | C79 | FERTILE Subclass 3 |
| 37 | C90 | FERTILE Subclass 3 |
| 38 | C5 | FERTILE Subclass 3 |
| 39 | A20 | FERTILE Subclass 3 |
| 40 | A26 | FERTILE Subclass 3 |
| 41 | A28 | FERTILE Subclass 3 |
| 42 | A39 | FERTILE Subclass 3 |
| 43 | A42 | FERTILE Subclass 3 |
| 44 | C65 | FERTILE Subclass 4 |
| 45 | C97 | FERTILE Subclass 4 |
| 46 | A11 | FERTILE Subclass 4 |
| 47 | A34 | FERTILE Subclass 4 |
| 48 | A40 | FERTILE Subclass 4 |
| 49 | A41 | FERTILE Subclass 4 |
| 50 | A47 | FERTILE Subclass 4 |
| 51 | A56 | FERTILE Subclass 4 |
| 52 | A17 | FERTILE Subclass 5 |
| 53 | A18 | FERTILE Subclass 5 |
| 54 | A21 | FERTILE Subclass 5 |
| 55 | A23 | FERTILE Subclass 5 |
| 56 | A25 | FERTILE Subclass 5 |
| 57 | A50 | FERTILE Subclass 6 |
| 58 | A59 | FERTILE Subclass 6 |
| 59 | A60 | FERTILE Subclass 6 |
| 60 | C66 | SIMPLE_INFERTILITY Subclass 1 |
| 61 | C45 | SIMPLE_INFERTILITY Subclass 1 |
| 62 | C8 | SIMPLE_INFERTILITY Subclass 1 |
| 63 | C4 | SIMPLE_INFERTILITY Subclass 1 |
| 64 | A7 | SIMPLE_INFERTILITY Subclass 1 |
| 65 | A48 | SIMPLE_INFERTILITY Subclass 1 |
| 66 | A1 | SIMPLE_INFERTILITY Subclass 2 |
| 67 | A16 | SIMPLE_INFERTILITY Subclass 2 |
| 68 | A45 | SIMPLE_INFERTILITY Subclass 2 |
| 69 | A46 | SIMPLE_INFERTILITY Subclass 2 |

RDA: Differential events counted per sample

Samples with higher amounts of 'Repeats' resemble

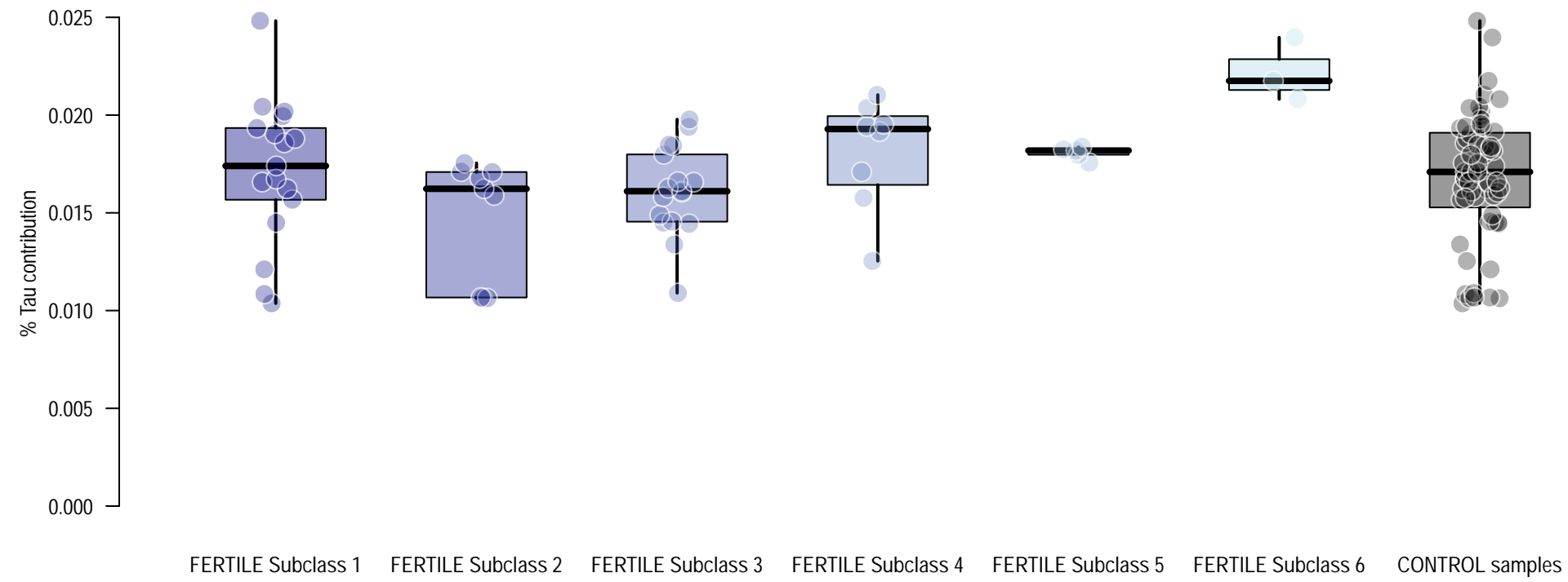
control profiles from other class of samples.



NSCA: Goodman and Kruskal's Tau contribution

A higher Tau value per sample indicates more sample-specific signal.

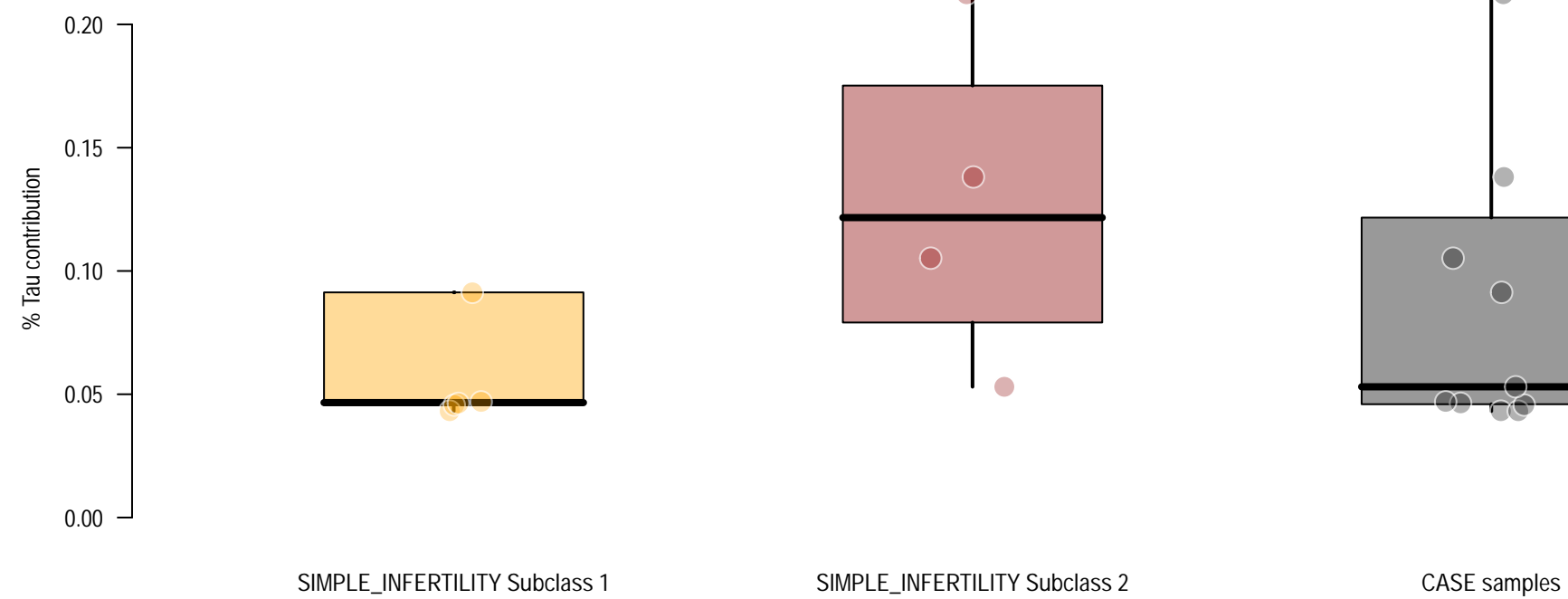
CONTROL samples



CONTROL NSCA

| | |
|-------------|--------------|
| Tau | 0.00172 |
| C.Statistic | 462523.50317 |
| p.value | 0 |

CASE samples

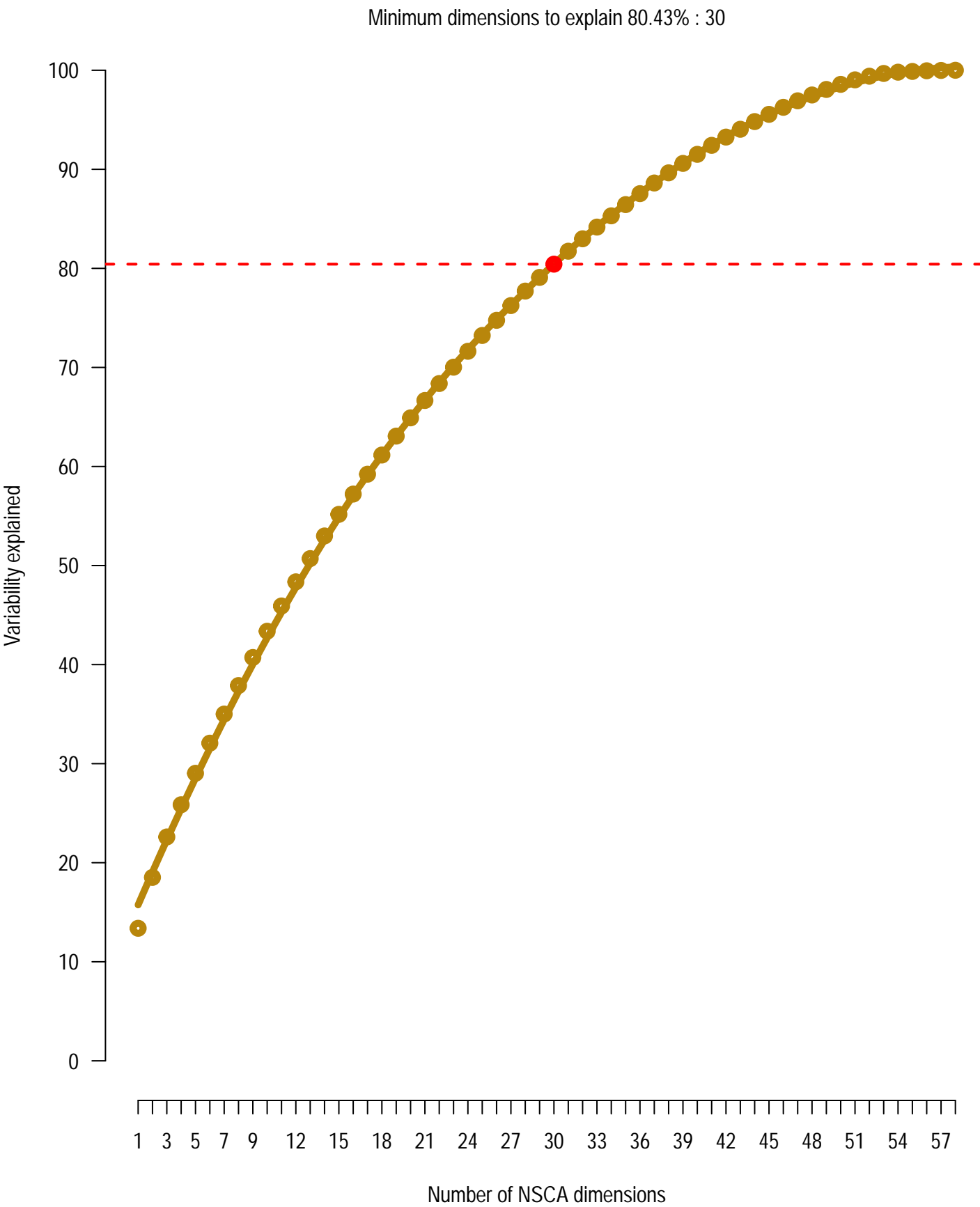


CASE NSCA

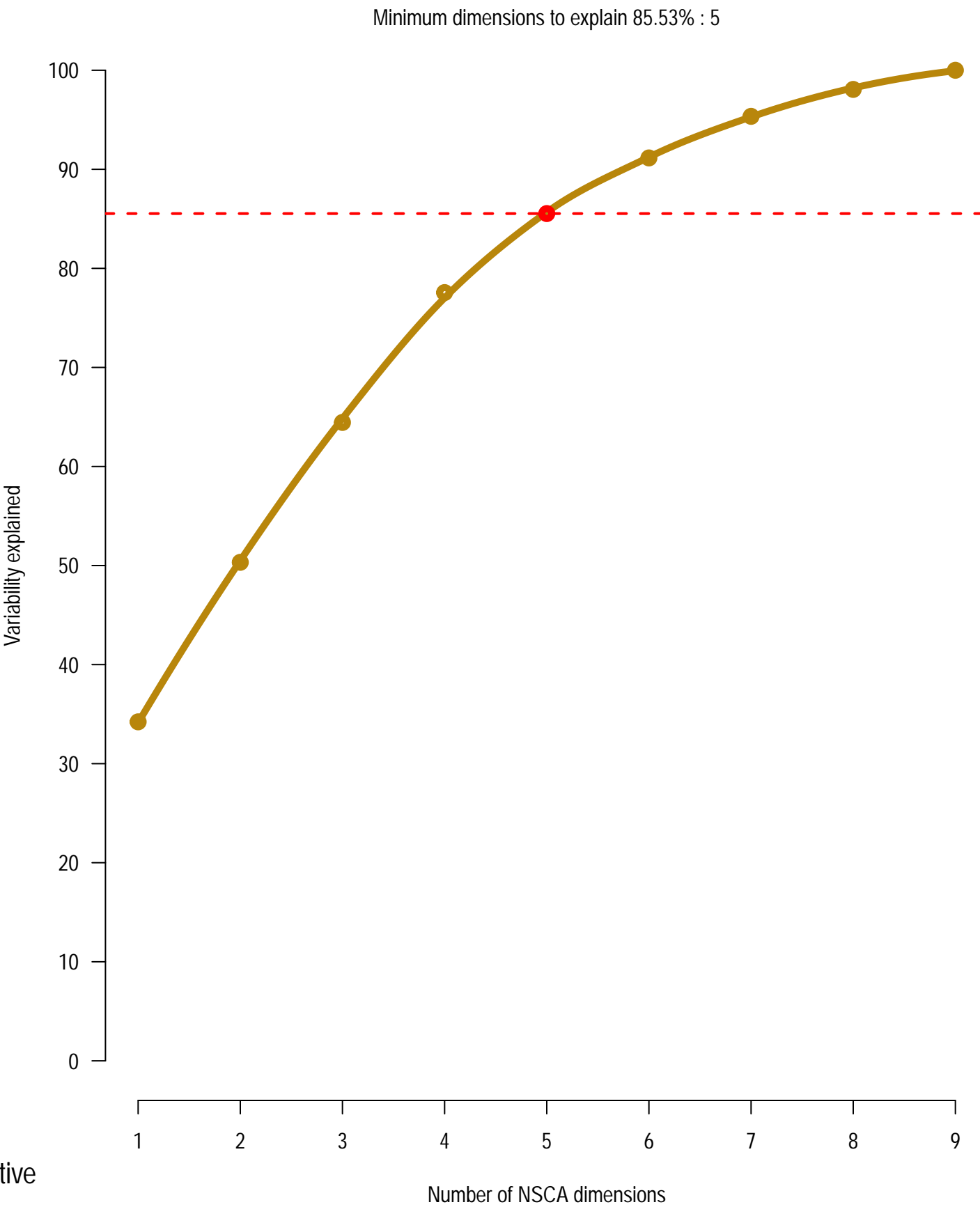
| | |
|-------------|-------------|
| Tau | 0.00024 |
| C.Statistic | 65197.34344 |
| p.value | 0 |

NSCA: Smooth-curve of variability explained

Control samples



Case samples



RDA: Top 50 feature signature, MAJORITIES ranking method was applied

[illegible]

X RDA info

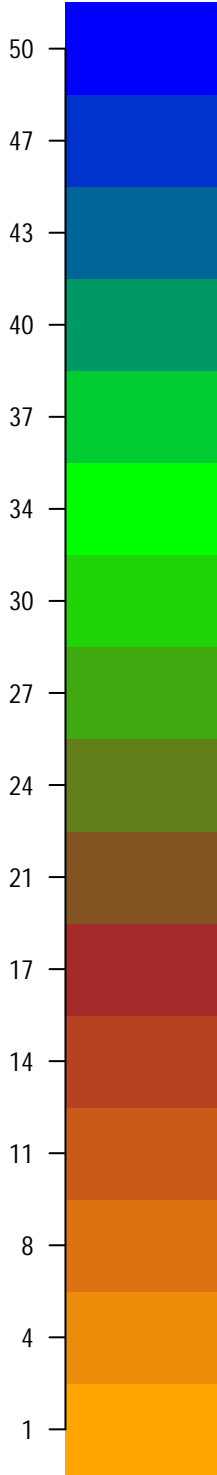
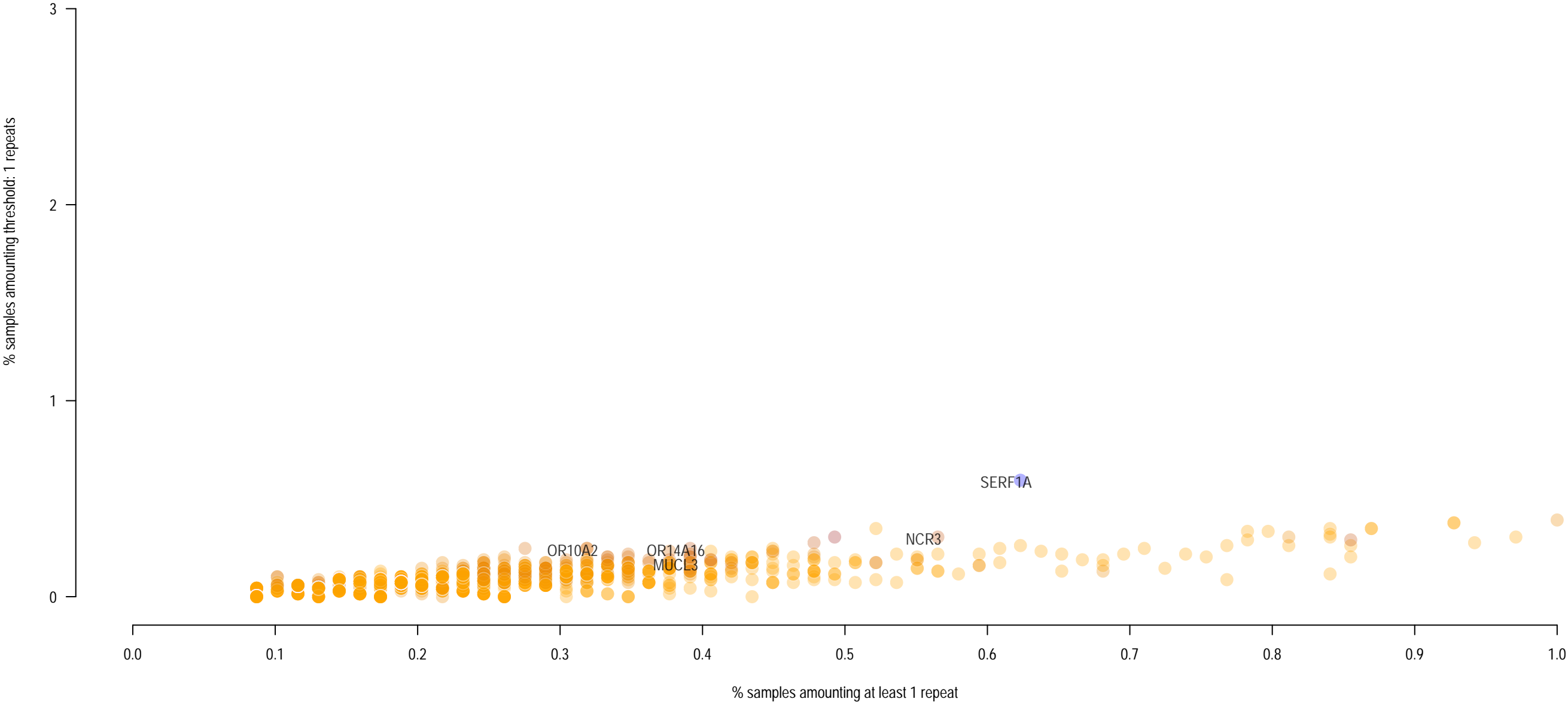
X NSCA: CONTROL info X NSCA: CASE info

RDA: Top 50 feature signature, MINORITIES ranking method was applied

| 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 | Dendrogram.group.Case | h.Range.Case |
|---------|--------------|--------------|------|----------|-------------------|---------------------|---------|---------------|--------------|---------|-----------------------|--------------|---------|-----------------------|--------------|
| 1 | NUTM1 | NUTM1 | DOWN | Minority | 0.746 | 4.411 | 1 | 8.696 | -0.80205637 | 1.584 | 1 | 65.080 | 1.905 | 4 | 16.484 |
| 2 | DYTN | DYTN | DOWN | Minority | 0.662 | 4.985 | 1 | 8.696 | -0.55174154 | 1.408 | 1 | 49.723 | 1.474 | 2 | 10.086 |
| 3 | SEL1L2 | SEL1L2 | DOWN | Minority | 0.735 | 8.471 | 2 | 11.594 | -0.58186570 | 1.595 | 1 | 66.888 | 1.499 | 2 | 15.149 |
| 4 | CFAP210 | CFAP210 | DOWN | Minority | 0.667 | 8.640 | 2 | 13.043 | -0.35537511 | 1.265 | 1 | 54.257 | 0.744 | 3 | 7.085 |
| 5 | PRR5L | PRR5L | DOWN | Minority | 0.705 | 6.528 | 2 | 11.594 | -0.25888992 | 0.803 | 2 | 27.229 | 0.911 | 6 | 4.427 |
| 6 | PHTF2 | PHTF2 | DOWN | Minority | 0.693 | 6.762 | 1 | 8.696 | -0.32546299 | 0.757 | 4 | 25.224 | 0.427 | 2 | 3.190 |
| 7 | ZIC2 | ZIC2 | DOWN | Minority | 0.610 | 6.524 | 2 | 11.594 | -0.17340546 | 1.357 | 2 | 56.331 | 1.427 | 6 | 4.715 |
| 8 | SFRP5 | SFRP5 | DOWN | Minority | 0.500 | 7.003 | 1 | 8.696 | 0.86816003 | 1.764 | 6 | 51.993 | 2.340 | 10 | 8.578 |
| 9 | ABCC6P1 | ABCC6P1 | UP | Minority | 0.743 | 4.833 | 1 | 8.696 | 0.09295986 | 0.396 | 9 | 11.898 | 0.565 | 7 | 1.098 |
| 10 | LINC02431 | LINC02431 | DOWN | Minority | 0.666 | 4.274 | 1 | 8.696 | -0.89613295 | 1.887 | 1 | 74.291 | 1.816 | 5 | 19.776 |
| 11 | XPA | XPA | UP | Minority | 0.711 | 5.920 | 1 | 8.696 | -0.02262502 | 0.482 | 10 | 29.394 | 0.613 | 8 | 0.532 |
| 12 | ADGRG5 | ADGRG5 | DOWN | Minority | 0.631 | 4.753 | 1 | 8.696 | -1.27804227 | 1.491 | 3 | 41.735 | 2.312 | 6 | 11.866 |
| 13 | C9orf43 | C9orf43 | DOWN | Minority | 0.717 | 4.649 | 1 | 8.696 | -0.28388848 | 0.894 | 1 | 35.818 | 0.886 | 4 | 8.002 |
| 14 | SLC25A48-AS1 | SLC25A48-AS1 | DOWN | Minority | 0.621 | 9.691 | 1 | 8.696 | -0.65959799 | 1.914 | 2 | 91.334 | 1.659 | 2 | 12.988 |
| 15 | C10orf62 | C10orf62 | DOWN | Minority | 0.673 | 6.460 | 2 | 11.594 | -0.47339230 | 1.545 | 1 | 63.270 | 1.392 | 3 | 13.350 |
| 16 | AGPAT1 | AGPAT1 | DOWN | Minority | 0.700 | 6.040 | 2 | 11.594 | -0.23075618 | 0.594 | 3 | 23.403 | 0.736 | 1 | 6.133 |
| 17 | CNN3-DT | NotAssigned | DOWN | Minority | 0.726 | 5.612 | 1 | 8.696 | -0.43720368 | 0.425 | 7 | 13.576 | 0.505 | 6 | 1.769 |
| 18 | DNAI4 | DNAI4 | DOWN | Minority | 0.734 | 5.791 | 2 | 11.594 | -0.49739669 | 0.877 | 4 | 42.183 | 0.748 | 4 | 6.513 |
| 19 | MYOC | MYOC | DOWN | Minority | 0.721 | 9.760 | 2 | 33.333 | -0.82576740 | 1.830 | 2 | 67.328 | 1.655 | 6 | 10.772 |
| 20 | TRPM6 | TRPM6 | DOWN | Minority | 0.712 | 5.615 | 2 | 11.594 | -0.43147186 | 0.671 | 1 | 23.927 | 0.454 | 5 | 4.208 |
| 21 | ANXA10 | ANXA10 | DOWN | Minority | 0.699 | 3.712 | 1 | 8.696 | -0.43563533 | 1.483 | 1 | 51.584 | 1.469 | 3 | 12.683 |
| 22 | NPTX1 | NPTX1 | DOWN | Minority | 0.636 | 6.098 | 1 | 8.696 | -1.06216709 | 1.444 | 3 | 51.976 | 1.691 | 6 | 10.039 |
| 23 | SLC15A5 | SLC15A5 | DOWN | Minority | 0.632 | 9.308 | 3 | 18.841 | -1.03658866 | 1.557 | 1 | 53.110 | 1.218 | 2 | 8.075 |
| 24 | TTC13 | TTC13 | DOWN | Minority | 0.712 | 3.891 | 1 | 8.696 | -0.27036643 | 0.466 | 1 | 12.739 | 0.307 | 9 | 0.928 |
| 25 | LINC02389 | LINC02389 | DOWN | Minority | 0.696 | 6.431 | 1 | 8.696 | -0.60027191 | 0.950 | 7 | 39.591 | 0.761 | 10 | 2.905 |
| 26 | NOS2 | NOS2 | DOWN | Minority | 0.557 | 3.918 | 1 | 17.391 | 0.11922337 | 1.369 | 8 | 34.948 | 1.615 | 7 | 4.728 |
| 27 | CPEB1-AS1 | CPEB1-AS1 | DOWN | Minority | 0.689 | 3.823 | 1 | 8.696 | -0.09400359 | 1.499 | 7 | 51.824 | 1.102 | 6 | 5.329 |
| 28 | SLC43A3 | SLC43A3 | DOWN | Minority | 0.678 | 7.302 | 2 | 11.594 | 0.04116651 | 1.561 | 8 | 52.394 | 1.481 | 6 | 0.133 |
| 29 | SPACA9 | SPACA9 | DOWN | Minority | 0.748 | 6.311 | 2 | 11.594 | 0.07721611 | 0.557 | 1 | 22.146 | 0.409 | 5 | 0.860 |
| 30 | SNRNP70 | SNRNP70 | UP | Minority | 0.734 | 4.088 | 1 | 8.696 | 0.22908074 | 0.259 | 9 | 6.630 | 0.316 | 8 | 0.162 |
| 31 | WDR64 | WDR64 | DOWN | Minority | 0.640 | 7.254 | 2 | 11.594 | -0.90564566 | 1.436 | 1 | 60.721 | 1.360 | 3 | 14.935 |
| 32 | MAB21L2 | MAB21L2 | DOWN | Minority | 0.656 | 9.997 | 1 | 8.696 | -0.05150291 | 1.163 | 6 | 12.351 | 1.030 | 9 | 4.984 |
| 33 | ABCA10 | ABCA10 | DOWN | Minority | 0.705 | 6.387 | 2 | 11.594 | -0.48798143 | 1.086 | 1 | 43.085 | 0.813 | 3 | 7.723 |
| 34 | SEC14L6 | SEC14L6 | DOWN | Minority | 0.663 | 4.585 | 1 | 8.696 | 0.34658936 | 1.152 | 7 | 31.024 | 1.666 | 10 | 6.130 |
| 35 | PRRX1 | PRRX1 | DOWN | Minority | 0.735 | 6.586 | 1 | 8.696 | -0.04912337 | 1.569 | 1 | 63.787 | 1.196 | 10 | 3.797 |
| 36 | ACTA2 | ACTA2 | DOWN | Minority | 0.726 | 4.046 | 1 | 8.696 | 0.01430755 | 0.794 | 7 | 29.057 | 1.363 | 10 | 3.813 |
| 37 | AGFG1 | AGFG1 | DOWN | Minority | 0.679 | 6.002 | 2 | 15.942 | -0.30687596 | 0.728 | 4 | 37.544 | 0.512 | 4 | 5.004 |
| 38 | KIF17 | KIF17 | DOWN | Minority | 0.734 | 6.316 | 2 | 11.594 | -0.53250402 | 1.484 | 3 | 62.215 | 1.437 | 3 | 14.208 |
| 39 | SNX20 | SNX20 | DOWN | Minority | 0.701 | 5.822 | 1 | 8.696 | -0.66439809 | 1.924 | 8 | 63.046 | 1.889 | 10 | 5.840 |
| 40 | CFAP61 | CFAP61 | DOWN | Minority | 0.606 | 8.274 | 2 | 11.594 | -0.74232761 | 1.487 | 1 | 64.268 | 1.122 | 3 | 12.532 |
| 41 | WNT2 | WNT2 | DOWN | Minority | 0.725 | 5.886 | 2 | 11.594 | -0.37422587 | 1.809 | 1 | 70.085 | 1.214 | 5 | 10.892 |
| 42 | AIM2 | AIM2 | DOWN | Minority | 0.649 | 5.339 | 1 | 8.696 | -0.54603251 | 1.640 | 1 | 65.751 | 1.409 | 5 | 14.566 |
| 43 | SPMIP2 | SPMIP2 | DOWN | Minority | 0.655 | 6.029 | 1 | 8.696 | -0.54594248 | 1.701 | 1 | 67.673 | 1.569 | 5 | 12.632 |
| 44 | CYB5RL | CYB5RL | UP | Minority | 0.740 | 5.083 | 1 | 8.696 | 0.20651894 | 0.317 | 9 | 7.514 | 0.273 | 1 | 1.490 |
| 45 | ANKRD36B | ANKRD36B | DOWN | Minority | 0.667 | 8.308 | 2 | 27.536 | -0.56215731 | 1.055 | 1 | 42.707 | 0.729 | 4 | 7.124 |
| 46 | NPL | NPL | DOWN | Minority | 0.712 | 7.700 | 2 | 47.826 | -0.11901397 | 0.829 | 7 | 28.696 | 0.365 | 10 | 1.191 |
| 47 | MS4A13 | MS4A13 | DOWN | Minority | 0.531 | 6.727 | 2 | 11.594 | -0.27745649 | 1.766 | 7 | 62.256 | 1.340 | 5 | 12.152 |
| 48 | ANKRD30A | ANKRD30A | DOWN | Minority | 0.708 | 4.044 | 1 | 8.696 | -0.59830985 | 1.448 | 1 | 62.229 | 1.210 | 5 | 12.850 |
| 49 | LINC01141 | NotAssigned | DOWN | Minority | 0.631 | 5.722 | 1 | 8.696 | -0.89095420 | 1.964 | 2 | 70.400 | 1.628 | 3 | 14.984 |
| 50 | ZBTB26 | ZBTB26 | DOWN | Minority | 0.672 | 4.684 | 1 | 8.696 | -0.47594083 | 0.803 | 4 | 44.593 | 0.872 | 4 | 5.738 |

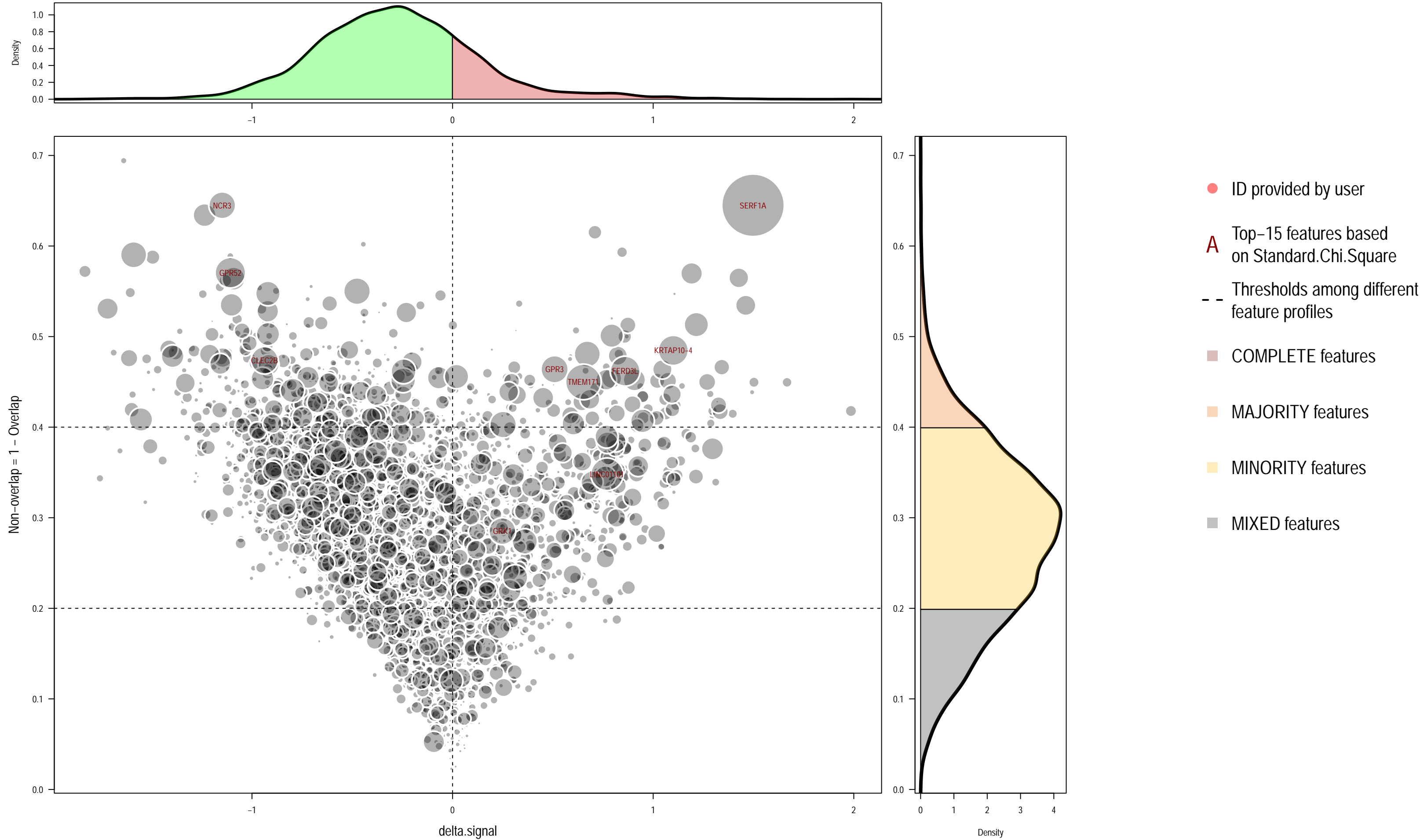
RDA: Repeats threshold based on differential events distribution per feature

● 0 features within <= 5 % samples with at least 1 repeats.

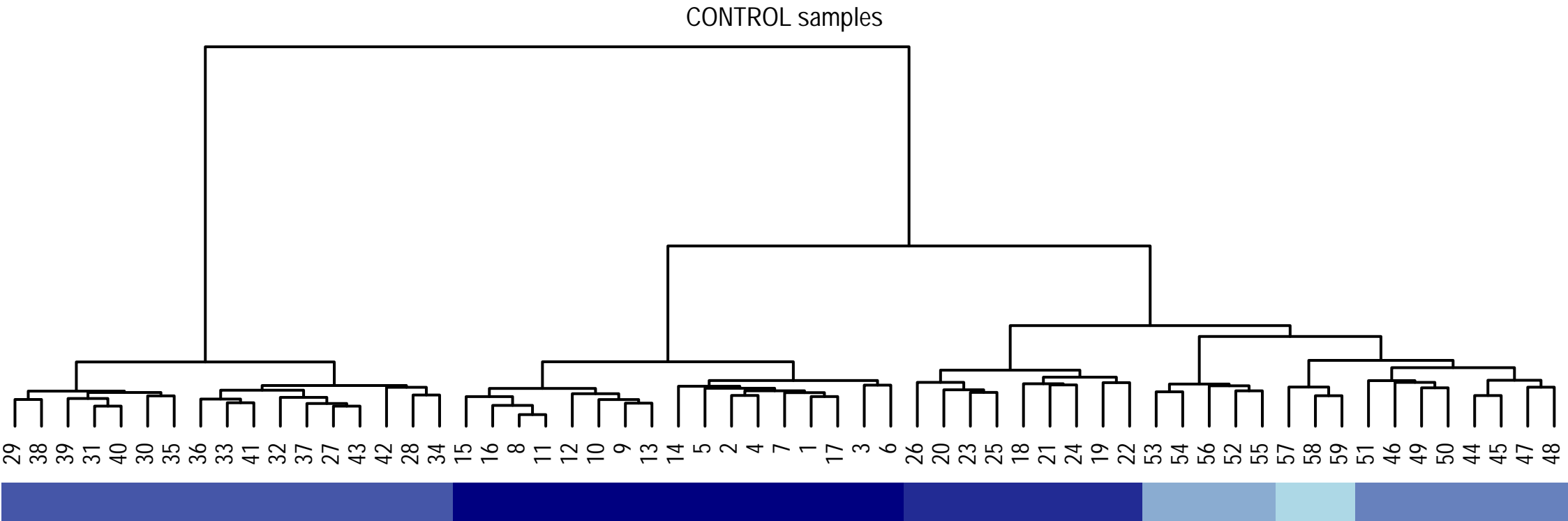


RDA: overlap Signal VS delta Signal plot

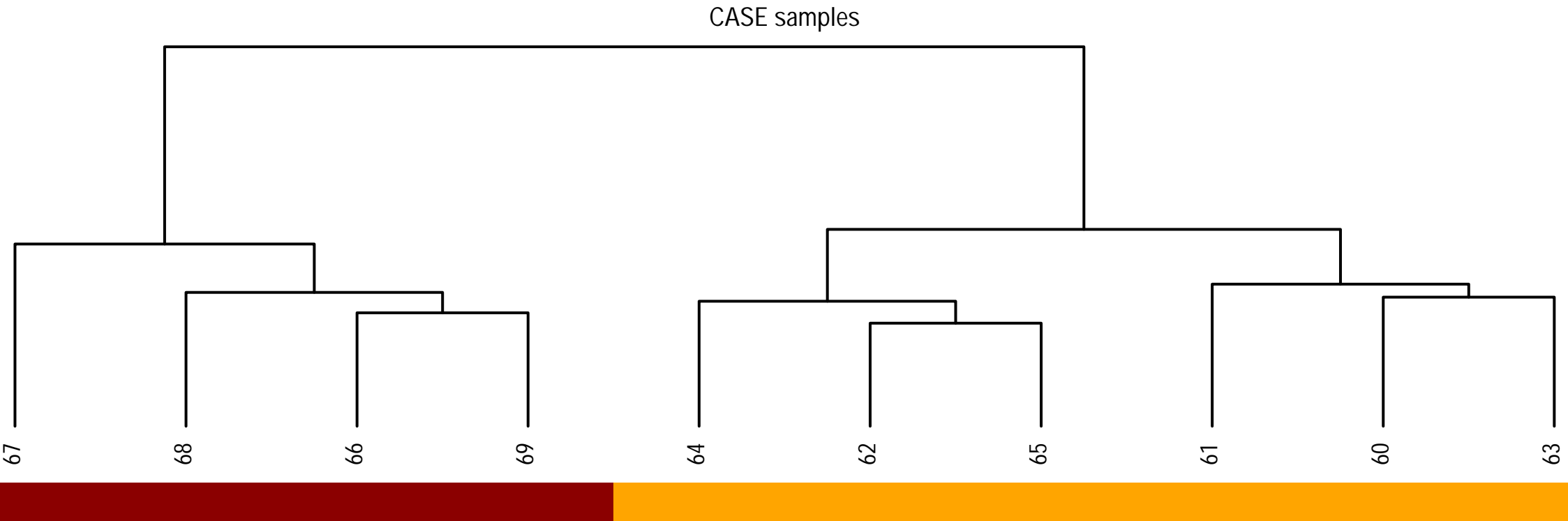
Circle size corresponds to relative amount of 'Standard.Chi.Square' per feature.
Higher circles indicate more DIFFERENTIAL SIGNAL between both classes.



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



Hubber's gamma coefficient for cutting dendrogram: 0.622



Hubber's gamma coefficient for cutting dendrogram: 0.716

Mean 'h' statistic per subclass within CONTROL samples

Top 50 discriminant features among subclasses found by DECO algorithm.

| ID | SYMBOL | Standard.Chi.Square | Ranking.Scl1.Ctrl | h.Scl1.Ctrl | Ranking.Scl2.Ctrl | h.Scl2.Ctrl | Ranking.Scl3.Ctrl | h.Scl3.Ctrl | Ranking.Scl4.Ctrl | h.Scl4.Ctrl | Ranking.Scl5.Ctrl | h.Scl5.Ctrl | Ranking.Scl6.Ctrl | h.Scl6.Ctrl | h.Range.Ctrl | Dendrogram.group.Ctrl | Dendrogram.order.Ctrl |
|--------------|--------------|---------------------|-------------------|-------------|-------------------|-------------|-------------------|-------------|-------------------|-------------|-------------------|-------------|-------------------|-------------|--------------|-----------------------|-----------------------|
| HLA-DQB1 | HLA-DQB1 | 29.936348 | 2976 | -19.531127 | 605 | -13.0565035 | 1504 | 28.70125970 | 1408 | 8.5272693 | 5886 | -1.3773257 | 1 | 153.13818 | 172.66930 | 6 | 4486 |
| WFDC21P | WFDC21P | 17.335275 | 5349 | -6.389238 | 1097 | -9.6251185 | 5103 | 8.91598834 | 350 | 16.7532883 | 4297 | 4.2380397 | 2 | 111.05918 | 120.68430 | 6 | 4485 |
| NKX2-1 | NKX2-1 | 10.805975 | 4840 | -8.964946 | 1185 | -9.2486327 | 6141 | 3.26975470 | 893 | -11.2453817 | 3307 | -6.1600589 | 3 | 101.54498 | 112.79036 | 5 | 4196 |
| MIR9-2HG | MIR9-2HG | 10.276745 | 1842 | -26.550284 | 629 | -12.8396166 | 3057 | 20.92131098 | 2516 | -5.2750099 | 6532 | 0.2808331 | 10 | 81.44336 | 107.99364 | 7 | 5071 |
| TERT | TERT | 13.756876 | 2288 | -23.899501 | 3265 | 4.2096924 | 4739 | 11.21421847 | 4768 | 2.0374129 | 328 | -18.8073955 | 18 | 78.05768 | 101.95718 | 7 | 4958 |
| GJD2 | GJD2 | 17.214469 | 2502 | -22.628680 | 2 | -39.1195223 | 2497 | 23.90678681 | 228 | 19.3759034 | 4427 | 4.0005328 | 63 | 62.30677 | 101.42629 | 7 | 5084 |
| S1PR4 | S1PR4 | 14.109416 | 5129 | -7.554945 | 162 | -19.3361431 | 6642 | 0.48823471 | 281 | 17.8583616 | 254 | -20.0804420 | 11 | 81.21704 | 101.29748 | 5 | 4150 |
| PODN | PODN | 10.515975 | 3726 | -14.961722 | 2814 | -4.9210615 | 5767 | 4.88190081 | 997 | -10.5505306 | 3265 | 6.2391978 | 5 | 85.57965 | 100.54137 | 5 | 4203 |
| PHOX2B | PHOX2B | 22.972503 | 3867 | -14.106971 | 2488 | -5.4911665 | 4539 | 12.24799486 | 953 | -10.8190727 | 630 | -15.4575807 | 7 | 84.48784 | 99.94542 | 5 | 4093 |
| TNFRSF4 | TNFRSF4 | 20.782351 | 1693 | -27.339495 | 1055 | -9.7920433 | 4203 | 14.03334005 | 43 | 27.2398122 | 104 | -25.0373773 | 30 | 72.59231 | 99.93180 | 8 | 6160 |
| SLC22A12 | SLC22A12 | 24.693752 | 2768 | -21.000384 | 65 | -23.1734716 | 2660 | 23.15663489 | 4894 | -1.8812992 | 746 | -14.6297403 | 25 | 74.52635 | 97.69982 | 7 | 5088 |
| C1QL2 | C1QL2 | 12.918646 | 3212 | -18.064546 | 901 | -10.6863213 | 4897 | 10.19269184 | 4821 | 1.9717696 | 2143 | -9.0185756 | 15 | 79.63140 | 97.69595 | 5 | 4094 |
| PDX1 | PDX1 | 12.147627 | 4136 | -12.591086 | 2641 | -5.2153688 | 5667 | 5.49139610 | 2462 | -5.3625773 | 1903 | -9.6179056 | 6 | 85.03132 | 97.62240 | 5 | 4181 |
| SLC6A18 | SLC6A18 | 13.942324 | 3755 | -14.804548 | 2376 | -5.7486976 | 5150 | 8.60144614 | 1033 | -10.3567738 | 2561 | -7.8594441 | 9 | 81.84725 | 96.65180 | 5 | 4177 |
| SBF1P1 | SBF1P1 | 21.976216 | 4637 | -9.894302 | 1429 | -8.2890630 | 6086 | -3.49505889 | 1383 | 8.6471827 | 3867 | -5.0773448 | 4 | 86.43934 | 96.33364 | 5 | 4202 |
| NR2E1 | NR2E1 | 14.739946 | 4915 | -8.637803 | 305 | -16.5934619 | 6028 | 3.74292883 | 1431 | -8.4647355 | 2812 | 7.2741415 | 14 | 79.65499 | 96.24845 | 5 | 4147 |
| OLIG2 | OLIG2 | 17.752771 | 2663 | -21.634210 | 9 | -30.0974630 | 3282 | 19.61208753 | 6209 | -0.4528773 | 483 | 16.7825908 | 53 | 64.95547 | 95.05293 | 7 | 5069 |
| VGLL2 | VGLL2 | 8.719934 | 3785 | -14.636901 | 1690 | -7.4616716 | 5635 | 5.64266883 | 6250 | 0.4096553 | 4204 | -4.4188816 | 13 | 80.36554 | 95.00244 | 5 | 4184 |
| NKX2-2 | NKX2-2 | 22.145183 | 1998 | -25.721241 | 632 | -12.8152712 | 2134 | 25.69498953 | 4629 | -2.1967016 | 2454 | -8.1479426 | 37 | 68.89605 | 94.61729 | 7 | 5074 |
| GPIHBP1 | GPIHBP1 | 15.964712 | 3234 | -17.851887 | 4975 | -1.9824619 | 5134 | 8.72471086 | 3661 | -3.3882736 | 3667 | -5.4688076 | 22 | 75.89532 | 93.74720 | 5 | 4187 |
| FOXB2 | FOXB2 | 11.425950 | 4712 | -9.528615 | 1249 | -9.0044154 | 5808 | 4.68317110 | 6356 | 0.3059118 | 448 | -17.2538242 | 21 | 76.14964 | 93.40347 | 5 | 4193 |
| FLJ16779 | FLJ16779 | 16.403965 | 2265 | -24.071136 | 842 | -11.0144755 | 3794 | 16.52184177 | 1554 | 7.8598129 | 1714 | -10.2065456 | 38 | 68.87652 | 92.94765 | 5 | 4100 |
| PRRT4 | PRRT4 | 7.236494 | 4610 | -10.052837 | 1092 | -9.6383295 | 4851 | 10.53354072 | 5511 | 1.2051861 | 100 | -25.4705546 | 48 | 66.67156 | 92.14212 | 5 | 4111 |
| NKX2-5 | NKX2-5 | 18.476272 | 4304 | -11.571906 | 2301 | -5.9019032 | 6606 | -0.74875862 | 4730 | 2.0808225 | 6609 | 0.1587024 | 12 | 80.40624 | 91.97815 | 5 | 4199 |
| ZSCAN10 | ZSCAN10 | 15.134476 | 3999 | -13.374694 | 1802 | -7.1293905 | 5396 | 7.10470737 | 4024 | -2.8951082 | 1814 | -9.8831991 | 17 | 78.37635 | 91.75104 | 5 | 4180 |
| BHLHE22 | BHLHE22 | 9.384731 | 4938 | -8.545458 | 1651 | -7.5773190 | 6535 | 1.23248382 | 1373 | -8.6925826 | 6528 | 0.2857390 | 8 | 83.00072 | 91.69330 | 5 | 4045 |
| SLC35D3 | SLC35D3 | 23.030705 | 6555 | -1.141007 | 657 | -12.5745296 | 6379 | -2.16932647 | 3237 | -3.9588460 | 1803 | -9.9157746 | 16 | 79.00827 | 91.58280 | 5 | 4195 |
| HAND2 | HAND2 | 9.677696 | 5392 | -6.199129 | 1697 | -7.4463046 | 6296 | 2.51904726 | 4088 | -2.8155459 | 883 | -13.7421308 | 19 | 77.80459 | 91.54672 | 5 | 4210 |
| SLC25A48-AS1 | SLC25A48-AS1 | 9.691498 | 1333 | -29.157397 | 425 | -14.9188435 | 43 | 37.74273577 | 809 | 11.7418019 | 2659 | 7.6389156 | 131 | -53.59078 | 91.33352 | 2 | 2322 |
| OR2K2 | OR2K2 | 13.278428 | 1452 | -28.620583 | 2407 | -5.6624098 | 16 | 39.14599309 | 905 | -11.1198027 | 512 | 16.5195328 | 149 | -51.71499 | 90.86099 | 1 | 381 |
| APLNR | APLNR | 11.666939 | 4945 | -8.502975 | 1888 | -6.9052005 | 6693 | 0.11000683 | 2318 | 5.6454102 | 842 | -13.9857659 | 20 | 76.72516 | 90.71092 | 5 | 4223 |
| MMRN1 | MMRN1 | 6.999974 | 103 | -37.243943 | 4040 | 3.1039266 | 9 | 39.61345126 | 6433 | 0.2554655 | 601 | 15.7180880 | 161 | -50.99277 | 90.60622 | 1 | 1679 |
| SIGLEC1 | SIGLEC1 | 4.045510 | 3758 | -14.794537 | 46 | -25.1120850 | 5020 | 9.43435124 | 179 | 20.6948465 | 1829 | -9.8156728 | 52 | 65.43972 | 90.55181 | 8 | 6174 |
| LHX3 | LHX3 | 9.337117 | 2531 | -22.411268 | 321 | -16.2898598 | 4167 | 14.28592366 | 728 | 12.3745490 | 4114 | -4.6198327 | 43 | 68.13528 | 90.54655 | 7 | 5080 |
| GAL3ST3 | GAL3ST3 | 18.620673 | 3067 | -18.978758 | 4378 | -2.7008977 | 4396 | 12.97954490 | 1211 | -9.3419102 | 5914 | 1.3485475 | 32 | 71.50239 | 90.48115 | 5 | 4080 |
| SLC9C2 | SLC9C2 | 6.500812 | 743 | -31.813393 | 3852 | -3.3778033 | 158 | 35.65645218 | 3517 | 3.5555914 | 310 | 19.0772333 | 121 | -54.03731 | 89.69376 | 1 | 596 |
| HMX2 | HMX2 | 14.277204 | 4267 | -11.783367 | 466 | -14.3851856 | 5293 | 7.78484645 | 6448 | 0.2421782 | 1246 | -12.0266098 | 23 | 75.19120 | 89.57639 | 5 | 4197 |
| C1QB | C1QB | 11.925762 | 4578 | -10.209609 | 1 | -45.7175953 | 5220 | 8.22289675 | 3 | 43.8241943 | 1577 | -10.7358070 | 290 | 41.43464 | 89.54179 | 8 | 6175 |
| KCNG4 | KCNG4 | 10.051374 | 3446 | -16.508072 | 15 | -29.4694269 | 4719 | 11.34444039 | 171 | 20.8654089 | 5757 | 1.5947569 | 79 | 59.96470 | 89.43413 | 7 | 5078 |
| MAG | MAG | 9.275067 | 1407 | -28.865434 | 4851 | 2.1370448 | 3514 | 18.23287675 | 5977 | 0.6977762 | 3291 | -6.1975804 | 72 | 60.41822 | 89.28366 | 5 | 4104 |
| KCNK4 | KCNK4 | 9.003595 | 1331 | -29.163017 | 5571 | -1.2682264 | 3639 | 17.33018706 | 3272 | 3.8942509 | 4698 | -3.4765190 | 82 | 59.43736 | 88.60038 | 7 | 5133 |
| SOST | SOST | 10.035143 | 5964 | -3.834391 | 420 | -14.9904816 | 6509 | -1.42616107 | 5105 | 1.6483542 | 5289 | -2.4229819 | 29 | 73.50933 | 88.49981 | 5 | 4240 |
| NGB | NGB | 25.294326 | 3788 | -14.623707 | 1567 | -7.8193382 | 5471 | 6.59539076 | 6039 | 0.6427138 | 2784 | -7.3407994 | 27 | 73.79135 | 88.41506 | 5 | 4095 |
| WNT16 | WNT16 | 20.470029 | 2528 | -22.430783 | 1159 | -9.3866950 | 4280 | 13.60381115 | 978 | 10.6423461 | 5496 | -2.0354173 | 50 | 65.64683 | 88.07761 | 5 | 4162 |
| IL17C | IL17C | 10.026021 | 5317 | -6.562466 | 104 | -21.0738736 | 6697 | 0.08790356 | 445 | 15.2653732 | 3142 | -6.5183534 | 47 | 66.86131 | 87.93518 | 5 | 4163 |
| NKX6-1 | NKX6-1 | 9.855783 | 2875 | -20.251514 | 300 | -16.6359931 | 3429 | 18.67690292 | 2797 | 4.6625518 | 953 | -13.4163292 | 46 | 67.25389 | 87.50540 | 5 | 4091 |
| NME8 | NME8 | 12.271904 | 1 | -44.298782 | 6109 | 0.6816525 | 1 | 43.20154671 | 4057 | 2.8488112 | 1988 | 9.4208100 | 1926 | -17.21251 | 87.50033 | 1 | 1060 |
| MOXD2P | MOXD2P | 12.173259 | 1869 | -26.440981 | 485 | -14.1977989 | 1922 | 26.76843809 | 42 | 27.3557546 | 263 | 19.8960215 | 77 | -60.02380 | 87.37955 | 7 | 5326 |
| LINC02398 | LINC02398 | 5.120354 | 1543 | -28.154670 | 3294 | -4.1521218 | 339 | 34.18240080 | 3663 | 3.3879919 | 1073 | 12.7925791 | 135 | -53.09408 | 87.27648 | 1 | 387 |
| TMPRSS11B | TMPRSS11B | 10.349993 | 2394 | -23.336740 | 1308 | -8.7274824 | 635 | 32.50089263 | 2300 | 5.6746611 | 2645 | 7.6582073 | 119 | -54.36102 | 86.86191 | 1 | 377 |

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 | h.Range.Case | Dendrogram.group.Case | Dendrogram.order.Case |
|-------------|-------------|---------------------|-------------------|-------------|-------------------|-------------|--------------|-----------------------|-----------------------|
| HLA-DQB1 | HLA-DQB1 | 29.936348 | 5921 | 0.4138556 | 1 | -39.33490 | 39.74875 | 4 | 2465 |
| MARCO | MARCO | 21.081924 | 604 | -5.2744620 | 2 | 34.33173 | 39.60620 | 9 | 5620 |
| ZNF716 | ZNF716 | 22.410108 | 267 | 6.0667624 | 3 | -30.06547 | 36.13223 | 4 | 2120 |
| POSTN | POSTN | 26.402000 | 1 | -13.8705885 | 8 | 20.82158 | 34.69217 | 9 | 5462 |
| SERPINE1 | SERPINE1 | 10.960646 | 2 | -13.8350095 | 10 | 20.33550 | 34.17051 | 9 | 5465 |
| NBPF22P | | 16.696481 | 1786 | 3.6758446 | 4 | -27.22643 | 30.90227 | 4 | 2225 |
| TSPO2 | TSPO2 | 16.130867 | 298 | 5.9993028 | 6 | -22.26172 | 28.26102 | 4 | 2211 |
| COL1A2 | COL1A2 | 8.086655 | 3 | -11.5379174 | 14 | 16.62917 | 28.16709 | 9 | 5463 |
| TUBAL3 | TUBAL3 | 10.396959 | 191 | 6.2907927 | 7 | -20.82174 | 27.11254 | 4 | 2229 |
| FAM99A | FAM99A | 13.230451 | 184 | 6.3152242 | 9 | -20.60976 | 26.92498 | 4 | 2176 |
| MIMT1 | MIMT1 | 13.725837 | 202 | 6.2464866 | 11 | -20.11230 | 26.35878 | 4 | 2116 |
| CCN2 | CCN2 | 14.067035 | 4 | -10.6832396 | 17 | 14.79789 | 25.48113 | 9 | 5464 |
| HCG4B | | 4.551944 | 5 | 9.9237345 | 16 | -14.84385 | 24.76758 | 2 | 809 |
| SLCO1C1 | SLCO1C1 | 5.596392 | 6 | 9.7860956 | 19 | -14.38879 | 24.17489 | 5 | 3395 |
| LINC00502 | | 15.612751 | 635 | 5.2240570 | 12 | -18.29487 | 23.51893 | 4 | 2228 |
| NKX2-1 | NKX2-1 | 10.805975 | 7 | -9.5710172 | 23 | 13.88405 | 23.45507 | 9 | 5460 |
| COL11A2 | COL11A2 | 10.645654 | 10 | 9.2845075 | 22 | -14.11916 | 23.40367 | 5 | 2677 |
| CCDC136 | CCDC136 | 10.700800 | 458 | 5.5492712 | 13 | -17.71943 | 23.26870 | 4 | 2259 |
| DCHS2 | DCHS2 | 6.798167 | 9 | 9.3992820 | 25 | -13.57687 | 22.97615 | 2 | 764 |
| LINC00221 | LINC00221 | 6.021059 | 8 | 9.4033340 | 26 | -13.56857 | 22.97191 | 3 | 1314 |
| OR2H1 | OR2H1 | 10.804990 | 12 | 9.0138773 | 27 | -13.28353 | 22.29740 | 2 | 876 |
| JRKL-AS1 | | 6.098438 | 14 | 8.7571143 | 28 | -13.04788 | 21.80499 | 5 | 3140 |
| HTR2A | HTR2A | 5.711840 | 15 | 8.7535307 | 29 | -12.98853 | 21.74206 | 3 | 1622 |
| LINC00251 | LINC00251 | 5.014666 | 16 | 8.7412274 | 30 | -12.96369 | 21.70491 | 3 | 1657 |
| CCL14 | CCL14 | 8.011274 | 18 | 8.7097515 | 32 | -12.67246 | 21.38221 | 1 | 495 |
| PRNT | PRNT | 8.253048 | 17 | 8.7245771 | 33 | -12.62225 | 21.34682 | 5 | 2952 |
| TNFRSF17 | TNFRSF17 | 4.188712 | 19 | 8.6582622 | 36 | -12.51439 | 21.17265 | 3 | 1313 |
| EREG | EREG | 10.226004 | 13 | -8.7794706 | 39 | 12.38005 | 21.15952 | 9 | 5461 |
| PRRT4 | PRRT4 | 7.236494 | 20 | -8.3910647 | 37 | 12.41607 | 20.80714 | 9 | 5389 |
| MUC7 | MUC7 | 17.749270 | 3255 | 2.1888349 | 5 | 22.89670 | 20.70787 | 9 | 5622 |
| ADRA1B | ADRA1B | 4.884035 | 23 | -8.2709364 | 38 | 12.40223 | 20.67317 | 9 | 5390 |
| LINC00609 | LINC00609 | 9.684404 | 21 | 8.3732904 | 43 | -12.26992 | 20.64321 | 4 | 2290 |
| DRD3 | DRD3 | 7.741616 | 24 | 8.2331822 | 42 | -12.30495 | 20.53813 | 5 | 2949 |
| SZRD1P1 | | 6.942272 | 22 | 8.3173280 | 44 | -12.10570 | 20.42303 | 3 | 1378 |
| IGLL5 | IGLL5 | 4.652579 | 29 | 8.0209151 | 41 | -12.32523 | 20.34615 | 3 | 1488 |
| CNTN1 | CNTN1 | 3.882557 | 27 | 8.1001678 | 45 | -12.10414 | 20.20430 | 3 | 1133 |
| FAM170B-AS1 | FAM170B-AS1 | 5.818834 | 25 | 8.1256648 | 46 | -11.96755 | 20.09322 | 4 | 2354 |
| LINC02431 | LINC02431 | 4.273629 | 26 | 8.1131569 | 51 | -11.66297 | 19.77613 | 5 | 3387 |
| FCRL3 | FCRL3 | 8.802858 | 35 | 7.8981499 | 49 | -11.85007 | 19.74822 | 4 | 2348 |
| RPL3L | RPL3L | 10.525080 | 34 | 7.9101155 | 50 | -11.74419 | 19.65431 | 2 | 917 |
| SCG5 | SCG5 | 11.361975 | 30 | 8.0141756 | 53 | -11.57441 | 19.58859 | 4 | 2332 |
| CCL15-CCL14 | | 7.707258 | 31 | 7.9428547 | 52 | -11.61864 | 19.56149 | 5 | 3391 |
| ADORA2B | ADORA2B | 10.071596 | 32 | -7.9267034 | 55 | 11.55311 | 19.47982 | 9 | 5394 |
| LHX3 | LHX3 | 9.337117 | 40 | -7.6629251 | 54 | 11.56844 | 19.23136 | 10 | 5798 |
| PRSS40A | PRSS40A | 4.748420 | 36 | 7.8488680 | 58 | -11.34376 | 19.19262 | 5 | 2955 |
| MACC1-AS1 | MACC1-AS1 | 5.408032 | 39 | 7.6806352 | 56 | -11.45672 | 19.13735 | 3 | 1153 |
| GOLGA8DP | GOLGA8DP | 7.379086 | 38 | 7.7446630 | 59 | -11.29163 | 19.03629 | 4 | 2330 |
| LINC00880 | LINC00880 | 17.559112 | 880 | 4.8325666 | 21 | -14.20022 | 19.03279 | 4 | 2245 |
| ANKRD20A9P | | 8.577375 | 42 | 7.6255072 | 57 | -11.34727 | 18.97278 | 3 | 2031 |
| SLC5A5 | SLC5A5 | 14.525507 | 28 | -8.0675303 | 80 | 10.71210 | 18.77963 | 9 | 5459 |