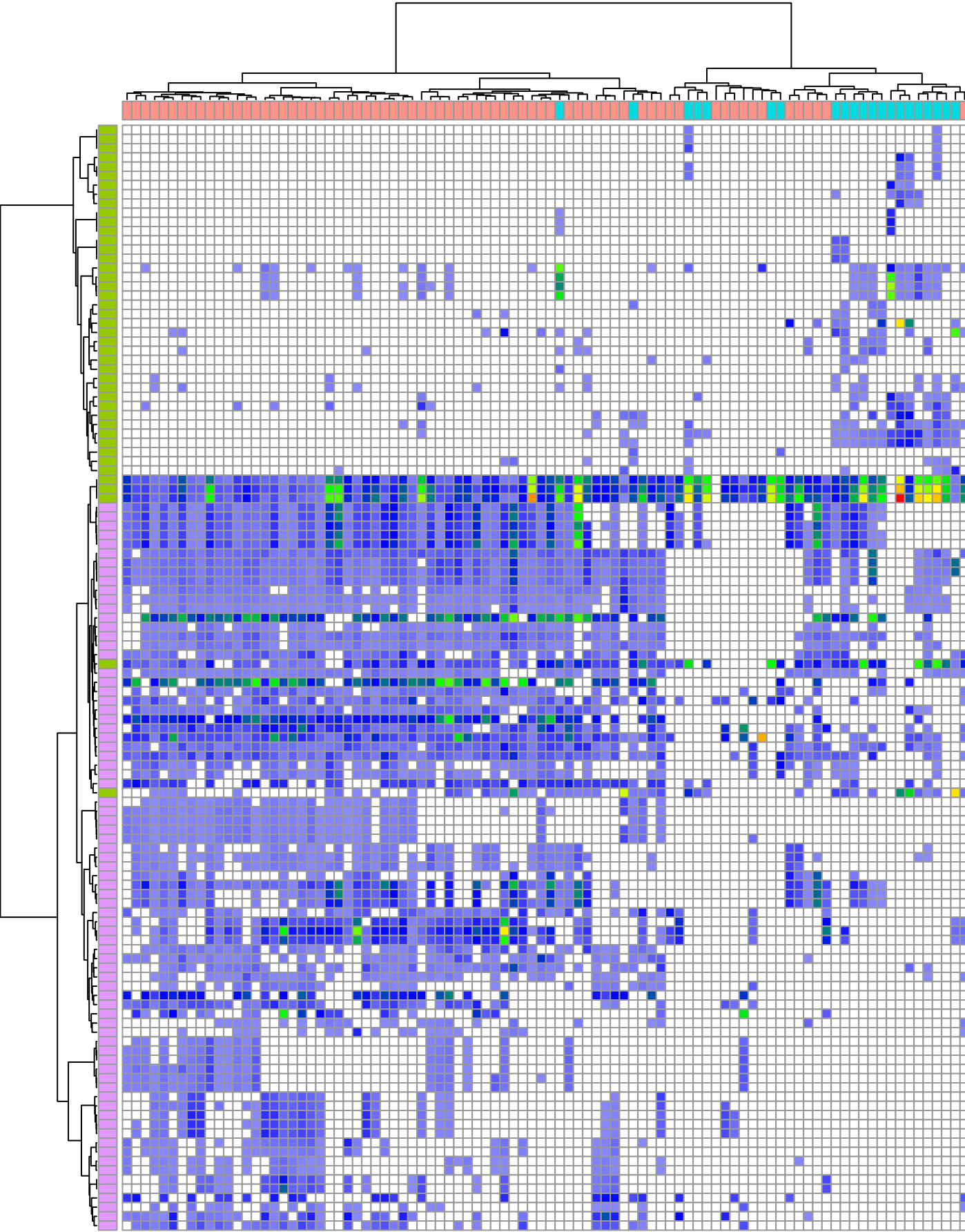
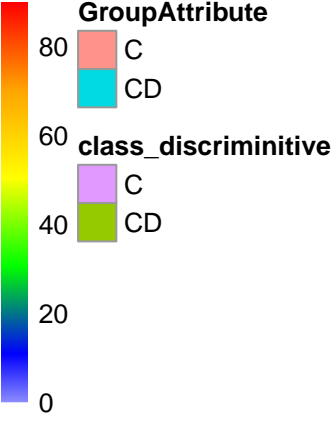


Ward.D Clustering with Binary



| GroupAttribute | Attribute | Value  |
|----------------|-----------|--|
| V1.CD21.0      | NODE      | 1679 length 11028 cov 2.82293 11028 nrps ANTISMASH 0 11028                 |
| V1.CD21.0      | NODE      | 1203 length 16973 cov 2.879 16973 nrps ANTISMASH 0 16973                   |
| V1.CD21.0      | NODE      | 1626 length 11571 cov 10.4784 11571 lantipeptide ANTISMASH 0 11571         |
| V1.CD35.0      | NODE      | 42 length 72857 cov 28.5797 20423 hserlactone ANTISMASH 94352 114775       |
| V1.CD21.4      | NODE      | 765 length 22253 cov 4.46495 22253 lantipeptide ANTISMASH 0 22253          |
| V1.CD35.1      | NODE      | 3453 length 6346 cov 2.92879 6346 lantipeptide ANTISMASH 0 6346            |
| V1.CD5.0       | NODE      | 2999 length 8272 cov 2.30449 8272 bacteriocin ANTISMASH 0 8272             |
| V1.CD18.3      | NODE      | 543 length 33639 cov 4.77606 26810 other ANTISMASH 0 26810                 |
| V1.CD35.0      | NODE      | 35 length 186011 cov 19.9468 24535 bacteriocin ANTISMASH 0 161476 186011   |
| V1.CD10.0      | NODE      | 47 length 98882 cov 2.3724 40183 ladderane ANTISMASH 0 40183               |
| V1.CD10.0      | NODE      | 1290 length 5616 cov 2.62938 5616 bacteriocin ANTISMASH 0 5616             |
| V1.CD10.0      | NODE      | 139 length 45764 cov 2.38955 16622 bacteriocin ANTISMASH 6137 22759        |
| V1.CD25.4      | NODE      | 6436 length 5714 cov 5.88426 5714 arylpolyene ANTISMASH 0 5714             |
| V1.CD25.4      | NODE      | 1517 length 22823 cov 6.87966 22823 arylpolyene ANTISMASH 0 22823          |
| V1.CD25.4      | NODE      | 39 length 18582 cov 10.1708 54510 nrps-t1pks ANTISMASH 44664 99174         |
| V1.CD41.0      | NODE      | 43 length 139509 cov 97.9643 53525 nrps ANTISMASH 80787 134312             |
| V1.CD18.3      | NODE      | 40 length 166683 cov 10.5209 59165 nrps-t1pks ANTISMASH 61574 120739       |
| V1.CD61.0      | NODE      | 2273 length 12464 cov 2.76678 12464 t1pks ANTISMASH 0 12464                |
| V1.CD61.0      | NODE      | 228 length 65988 cov 4.67854 26289 nrps ANTISMASH 39699 65988              |
| V1.CD17.4      | NODE      | 2658 length 14931 cov 2.32393 14931 nrps ANTISMASH 0 14931                 |
| V1.CD25.4      | NODE      | 5477 length 6837 cov 2.69806 6837 arylpolyene ANTISMASH 0 6837             |
| V1.CD35.1      | NODE      | 7205 length 6247 cov 4.36637 9798 resorcinol ANTISMASH 0 9798              |
| V1.CD41.0      | NODE      | 5730 length 6247 cov 2.11111 6247 nrps ANTISMASH 0 6247                    |
| V1.CD18.0      | NODE      | 417 length 48226 cov 3.4221 42642 nrps ANTISMASH 5584 48226                |
| V1.CD25.4      | NODE      | 771 length 38707 cov 6.2539 38707 nrps ANTISMASH 0 38707                   |
| V1.CD15.3      | NODE      | 827 length 38994 cov 4.72174 38994 nrps ANTISMASH 0 38994                  |
| V1.CD41.0      | NODE      | 100 length 108541 cov 8.66845 100392 otherks-transatpks ANTISMASH_0 100392 |
| O2.UC37.2      | NODE      | 786 length 34300 cov 5.98561 26046 other ANTISMASH 0 26046                 |
| V1.CD7.4       | NODE      | 2427 length 10544 cov 3.75517 10544 bacteriocin ANTISMASH 0 10544          |
| V1.CD10.0      | NODE      | 453 length 17115 cov 2.32239 17115 siderophore ANTISMASH 0 17115           |
| V1.CD35.1      | NODE      | 3185 length 6846 cov 4.30231 6846 siderophore ANTISMASH 0 6846             |
| V1.CD40.0      | NODE      | 487 length 42915 cov 7.06325 42915 nrps ANTISMASH 0 42915                  |
| V1.CD61.0      | NODE      | 930 length 26002 cov 3.77986 26002 nrps ANTISMASH 0 26002                  |
| V1.CD18.3      | NODE      | 1145 length 114577 cov 12.9704 43190 nrps ANTISMASH 49316 92506            |
| V1.CD35.1      | NODE      | 26 length 121253 cov 16.4398 25354 nrps ANTISMASH 0 25354                  |
| V1.CD6.4       | NODE      | 97 length 81392 cov 6.54071 10957 bacteriocin ANTISMASH 51098 62055        |
| V1.CD27.0      | NODE      | 4871 length 6213 cov 1.81796 6213 bacteriocin ANTISMASH 0 6213             |
| V1.CD7.4       | NODE      | 132 length 76953 cov 16.3885 52413 nrps ANTISMASH 9925 62338               |
| V1.UC48.0      | NODE      | 2643 length 14915 cov 8.95087 14915 arylpolyene ANTISMASH 0 14915          |
| O2.UC57.0      | NODE      | 4652 length 6645 cov 3.78483 6645 arylpolyene ANTISMASH 0 6645             |
| V1.CD35.0      | NODE      | 191 length 77163 cov 207.909 48007 arylpolyene ANTISMASH 29156 77163       |
| O2.UC59.0      | NODE      | 2938 length 10198 cov 1.24352 10198 nrps ANTISMASH 0 10198                 |
| V1.UC35.0      | NODE      | 3761 length 8328 cov 3.02937 8328 nrps ANTISMASH 0 8328                    |
| O2.UC58.2      | NODE      | 543 length 31008 cov 3.90172 15316 terpene ANTISMASH 15692 31008           |
| V1.UC1.0       | NODE      | 143 length 67550 cov 5.59133 45408 nrps ANTISMASH 0 45408                  |
| V1.CD24.0      | NODE      | 1524 length 1793 cov 1.92448 16793 lantipeptide ANTISMASH 0 16793          |
| V1.CD24.0      | NODE      | 2684 length 11411 cov 1.71486 11411 lantipeptide ANTISMASH 0 11411         |
| V1.UC33.0      | NODE      | 4808 length 8485 cov 7.31767 8485 lantipeptide ANTISMASH 0 8485            |
| V1.CD19.0      | NODE      | 4975 length 8961 cov 11.3461 8961 lantipeptide ANTISMASH 0 8961            |
| V1.UC2.0       | NODE      | 3288 length 9230 cov 2.07673 9230 lantipeptide ANTISMASH 0 9230            |
| V1.UC54.4      | NODE      | 1536 length 32221 cov 5.91283 32221 nrps ANTISMASH 0 32221                 |
| V1.UC35.1      | NODE      | 3457 length 9939 cov 7.8636 9939 nrps ANTISMASH 0 9939                     |
| V1.UC32.0      | NODE      | 504 length 53181 cov 4.4757 12856 lantipeptide ANTISMASH 40325 53181       |
| O2.UC2.0       | NODE      | 1749 length 11584 cov 22.9975 11584 microcin ANTISMASH 0 11584             |
| V1.UC26.4      | NODE      | 500 length 57939 cov 3.42504 23420 nrps ANTISMASH 0 23420                  |
| V1.UC13.3      | NODE      | 8 length 352946 cov 11.3323 43253 nrps ANTISMASH 246457 289710             |
| V1.UC35.0      | NODE      | 750 length 8343 cov 1.61617 8343 nrps ANTISMASH 0 8343                     |
| V1.UC24.0      | NODE      | 1272 length 14434 cov 2.52111 14434 lantipeptide ANTISMASH 0 14434         |
| O2.UC40.0      | NODE      | 572 length 31279 cov 4.51163 26382 resorcinol ANTISMASH 4897 31279         |
| O2.UC51.2      | NODE      | 6087 length 7538 cov 1.82547 7538 arylpolyene ANTISMASH 0 7538             |
| O2.UC44.2      | NODE      | 2186 length 12877 cov 12.4771 10481 microcin ANTISMASH 2396 12877          |
| V1.CD42.0      | NODE      | 1823 length 17721 cov 4.4267 17721 lantipeptide ANTISMASH 0 17721          |
| O2.UC27.0      | NODE      | 1358 length 18223 cov 3.1286 1823 t1pks ANTISMASH 0 18223                  |
| O2.UC60.0      | NODE      | 448 length 27925 cov 2.72723 619 bacteriocin ANTISMASH 1806 27925          |
| V1.UC53.4      | NODE      | 1077 length 19809 cov 14.4938 19809 microcin ANTISMASH 0 19809             |
| O2.UC40.2      | NODE      | 1120 length 21276 cov 8.2432 21276 lantipeptide ANTISMASH 0 21276          |
| V1.UC40.0      | NODE      | 1950 length 15791 cov 7.39286 15791 nrps ANTISMASH 0 15791                 |
| V1.CD36.0      | NODE      | 441 length 59544 cov 19.0451 25820 nrps ANTISMASH 33724 59544              |
| V1.CD42.0      | NODE      | 2860 length 11958 cov 6.16424 11958 lantipeptide ANTISMASH 0 11958         |
| O2.UC4.2       | NODE      | 4234 length 9225 cov 3.0723 9225 bacteriocin ANTISMASH 0 9225              |
| O2.UC56.2      | NODE      | 3772 length 7714 cov 2.10772 7714 aslopeptide ANTISMASH 0 7714             |
| V1.UC34.0      | NODE      | 2685 length 11165 cov 5.31233 11165 microcin ANTISMASH 0 11165             |
| V1.UC52.1      | NODE      | 475 length 50230 cov 2.94288 14251 lantipeptide ANTISMASH 0 14251          |
| V1.UC29.0      | NODE      | 2159 length 10983 cov 2.64165 10983 other ANTISMASH 0 10983                |
| O2.UC59.0      | NODE      | 285 length 50933 cov 3.3811 24258 other ANTISMASH 26675 50933              |
| O2.UC39.0      | NODE      | 1245 length 17671 cov 0.03646 17671 other ANTISMASH 0 17671                |
| V1.UC10.2      | NODE      | 1689 length 17780 cov 3.95876 17780 other ANTISMASH 0 17780                |
| V1.UC5.3       | NODE      | 695 length 47782 cov 4.43657 22861 other ANTISMASH 24921 47782             |
| O2.UC27.2      | NODE      | 371 length 47497 cov 2.18766 25369 other ANTISMASH 0 25369                 |
| O2.UC27.0      | NODE      | 272 length 64235 cov 5.29347 34842 other ANTISMASH 29393 64235             |
| O2.UC241.0     | NODE      | 722 length 29497 cov 1.19999 29497 other ANTISMASH 0 29497                 |
| V1.UC38.0      | NODE      | 12 length 258856 cov 31.9501 10225 bacteriocin ANTISMASH 190339 200564     |
| O2.UC59.0      | NODE      | 2715 length 10905 cov 1.50295 10905 bacteriocin ANTISMASH 0 10905          |
| O2.UC37.0      | NODE      | 1047 length 20443 cov 3.24088 15779 bacteriocin ANTISMASH 4664 20443       |
| O2.UC44.2      | NODE      | 1454 length 17419 cov 4.14449 16963 bacteriocin ANTISMASH 456 17419        |
| O2.UC23.2      | NODE      | 123 length 53602 cov 5.17215 42532 other ANTISMASH 8083 50615              |
| V1.CD30.0      | NODE      | 2651 length 10126 cov 1.26442 8030 bacteriocin ANTISMASH 2096 10126        |
| O2.UC51.2      | NODE      | 137 length 100686 cov 22.0268 18231 bacteriocin ANTISMASH 82455 100686     |
| V1.UC62.0      | NODE      | 31 length 180575 cov 19.4374 62233 nrps-ladderane ANTISMASH 16961 79194    |
| V1.UC1.0       | NODE      | 5044 length 6340 cov 2.01559 6340 bacteriocin ANTISMASH 0 6340             |
| V1.UC52.0      | NODE      | 4707 length 8186 cov 5.00332 8186 terpene ANTISMASH 0 8186                 |
| V1.UC24.0      | NODE      | 681 length 25720 cov 4.37886 25720 sactipeptide ANTISMASH 0 25720          |
| V1.UC58.0      | NODE      | 7831 length 5607 cov 2.75648 5607 arylpolyene ANTISMASH 0 5607             |
| V1.UC93.4      | NODE      | 3334 length 7067 cov 1.16415 7067 lantipeptide ANTISMASH 0 7067            |
| O2.UC1.2       | NODE      | 2735 length 11824 cov 7.70023 11824 microcin ANTISMASH 0 11824             |
| V1.UC24.0      | NODE      | 13 length 166603 cov 10.2427 43260 nrps ANTISMASH 94591 137851             |
| O2.UC60.0      | NODE      | 4 length 262054 cov 23.2222 42592 other ANTISMASH 39658 82250              |
| V1.CD28.0      | NODE      | 533 length 44098 cov 6.24944 37790 arylpolyene ANTISMASH 6308 44098        |
| V1.CD31.0      | NODE      | 324 length 45336 cov 5.271 35893 other ANTISMASH 9443 45336                |
| O2.UC2.0       | NODE      | 1230 length 14811 cov 1.83159 14811 nrps ANTISMASH 0 14811                 |
| O2.UC3.0       | NODE      | 245 length 55949 cov 3.1289 41008 nrps ANTISMASH 14941 55949               |
| O2.UC4.2       | NODE      | 6683 length 6170 cov 1.37449 6170 other ANTISMASH 0 6170                   |
| V1.UC30.0      | NODE      | 1721 length 15433 cov 2.04207 15433 nrps ANTISMASH 0 15433                 |
| O2.UC2.0       | NODE      | 2008 length 10579 cov 1.95144 10579 other ANTISMASH 0 10579                |
| O2.UC29.0      | NODE      | 2213 length 9695 cov 4.42842 9695 other ANTISMASH 0 9695                   |
| V1.UC28.0      | NODE      | 2 length 235713 cov 4.95209 30557 nrps ANTISMASH 0 30557                   |
| O2.UC4.2       | NODE      | 2825 length 12709 cov 4.34527 12709 nrps ANTISMASH 0 12709                 |
| V1.UC61.0      | NODE      | 459 length 41744 cov 4.85281 24015 nrps ANTISMASH 17729 41744              |
| O2.UC40.2      | NODE      | 238 length 57921 cov 2.74441 23548 nrps ANTISMASH 34373 57921              |
| O2.UC51.0      | NODE      | 19 length 172368 cov 7.02516 24652 nrps ANTISMASH 0 24652                  |
| O2.UC40.8      | NODE      | 1008 length 71340 cov 3.29287 43402 other ANTISMASH 13556 56758            |
| O2.UC55.0      | NODE      | 5538 length 6976 cov 1.15865 6976 other ANTISMASH 0 6976                   |
| V1.UC40.0      | NODE      | 1422 length 20304 cov 4.52593 15088 bacteriocin ANTISMASH 5216 20304       |
| V1.UC52.1      | NODE      | 4925 length 9379 cov 3.29794 9379 bacteriocin ANTISMASH 0 9379             |
| V1.UC30.0      | NODE      | 6593 length 5371 cov 1.32731 5371 nrps ANTISMASH 0 5371                    |
| V1.UC26.4      | NODE      | 35 length 189049 cov 13.4329 42953 nrps ANTISMASH 104265 147218            |
| O2.UC48.2      | NODE      | 1990 length 14237 cov 2.29502 14237 microcin ANTISMASH 0 14237             |
| V1.UC59.1      | NODE      | 4 length 45328 cov 8.44019 22700 lantipeptide ANTISMASH 380667 403367      |
| O2.UC44.0      | NODE      | 659 length 29813 cov 4.62662 24979 bacteriocin ANTISMASH 4834 29813        |
| V1.UC45.0      | NODE      | 970 length 21406 cov 2.56283 21406 lantipeptide ANTISMASH 0 21406          |



class\_discriminative