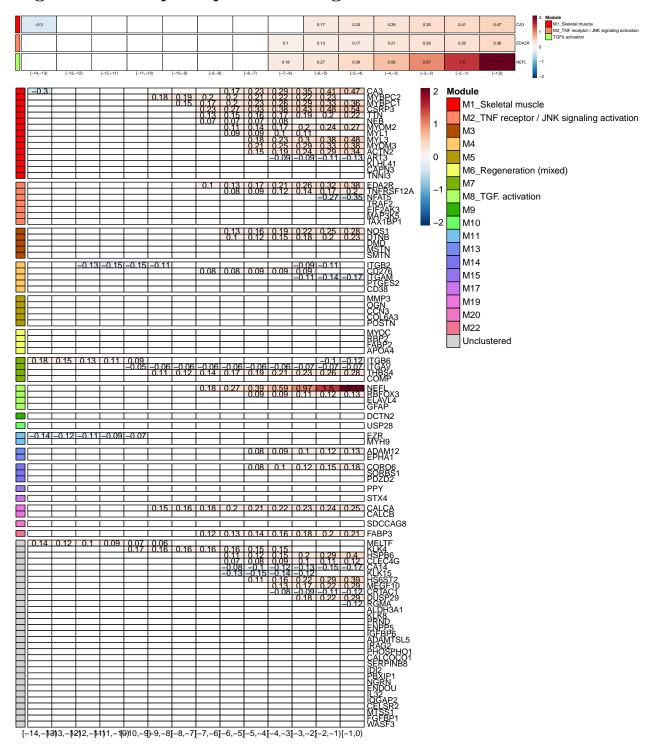
Figure 5 Ximing Ran 2025-10-15

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Fig 2B: heatmap for protein change



Session Info

```
## R version 4.4.0 (2024-04-24)
## Platform: aarch64-apple-darwin20
## Running under: macOS 26.0.1
##
## Matrix products: default
           /Library/Frameworks/R.framework/Versions/4.4-arm64/Resources/lib/libRblas.0.dylib
## LAPACK: /Library/Frameworks/R.framework/Versions/4.4-arm64/Resources/lib/libRlapack.dylib; LAPACK v
## locale:
## [1] en_US.UTF-8/en_US.UTF-8/en_US.UTF-8/C/en_US.UTF-8/en_US.UTF-8
## time zone: America/New_York
## tzcode source: internal
## attached base packages:
## [1] stats
                 graphics grDevices utils
                                                datasets methods
                                                                    base
## other attached packages:
## [1] RColorBrewer_1.1-3 pheatmap_1.0.12
                                               igraph_2.1.4
                                                                  ggnewscale_0.5.1
## [5] ggforce_0.4.2
                           scales_1.4.0
                                               tidygraph_1.3.1
                                                                  ggraph_2.2.1
## [9] gprofiler2_0.2.3
                           ggrepel_0.9.6
                                               progress_1.2.3
                                                                  kableExtra_1.4.0
## [13] lmerTest_3.1-3
                           lme4_1.1-37
                                               Matrix_1.7-3
                                                                  ggpubr_0.6.0
                           jtools_2.3.0
## [17] cowplot_1.1.3
                                               ggsignif_0.6.4
                                                                  extrafont_0.19
## [21] gridExtra_2.3
                           OlinkAnalyze_4.2.0 arrow_20.0.0
                                                                  knitr_1.50
## [25] lubridate_1.9.4
                           forcats_1.0.0
                                               stringr_1.5.1
                                                                  dplyr_1.1.4
                                                                  tibble_3.2.1
## [29] purrr_1.1.0
                           readr_2.1.5
                                               tidyr_1.3.1
## [33] ggplot2_4.0.0
                           tidyverse_2.0.0
##
## loaded via a namespace (and not attached):
## [1] rstudioapi_0.17.1
                             jsonlite_2.0.0
                                                 magrittr_2.0.3
                                                 nloptr_2.2.1
## [4] estimability_1.5.1
                            farver_2.1.2
## [7] rmarkdown_2.29
                            ragg_1.4.0
                                                 fs_1.6.6
## [10] vctrs_0.6.5
                            memoise_2.0.1
                                                 minqa_1.2.8
## [13] tinytex_0.57
                            rstatix_0.7.2
                                                 htmltools_0.5.8.1
## [16] broom_1.0.8
                            cellranger_1.1.0
                                                 Formula_1.2-5
## [19] gridGraphics_0.5-1
                            parallelly_1.44.0
                                                 htmlwidgets_1.6.4
## [22] emmeans_1.11.1
                            plotly_4.10.4
                                                 cachem_1.1.0
## [25] lifecycle_1.0.4
                            pkgconfig_2.0.3
                                                 R6_2.6.1
## [28] fastmap_1.2.0
                            rbibutils_2.3
                                                 future_1.49.0
## [31] digest_0.6.37
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## [34] rprojroot_2.0.4
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                                                 labeling_0.4.3
## [37] timechange_0.3.0
                            httr 1.4.7
                                                 polyclip_1.10-7
## [40] abind_1.4-8
                            compiler_4.4.0
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## [43] bit64 4.6.0-1
                            withr_3.0.2
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## [46] S7_0.2.0
                            backports_1.5.0
                                                 carData_3.0-5
## [49] viridis_0.6.5
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                                                 broom.mixed_0.2.9.6
## [52] MASS_7.3-65
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                                                 extrafontdb_1.0
                            nlme_3.1-168
## [55] glue_1.8.0
                                                 grid_4.4.0
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                                                 tzdb_0.5.0
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## [64] car_3.1-3
                            pillar_1.10.2
                                                 yulab.utils_0.2.0
                            tweenr_2.0.3
## [67] splines_4.4.0
                                                 lattice_0.22-7
```

## [70] bit_4.6.0	tidyselect_1.2.1	reformulas_0.4.1
## [73] svglite_2.2.1	xfun_0.52	<pre>graphlayouts_1.2.2</pre>
## [76] stringi_1.8.7	lazyeval_0.2.2	yaml_2.3.10
## [79] boot_1.3-31	evaluate_1.0.3	codetools_0.2-20
## [82] ggplotify_0.1.2	cli_3.6.5	xtable_1.8-4
## [85] systemfonts_1.2.3	Rdpack_2.6.4	dichromat_2.0-0.1
## [88] Rcpp_1.0.14	readxl_1.4.5	globals_0.18.0
## [91] coda_0.19-4.1	parallel_4.4.0	assertthat_0.2.1
## [94] prettyunits_1.2.0	listenv_0.9.1	viridisLite_0.4.2
## [97] mvtnorm_1.3-3	crayon_1.5.3	rlang_1.1.6