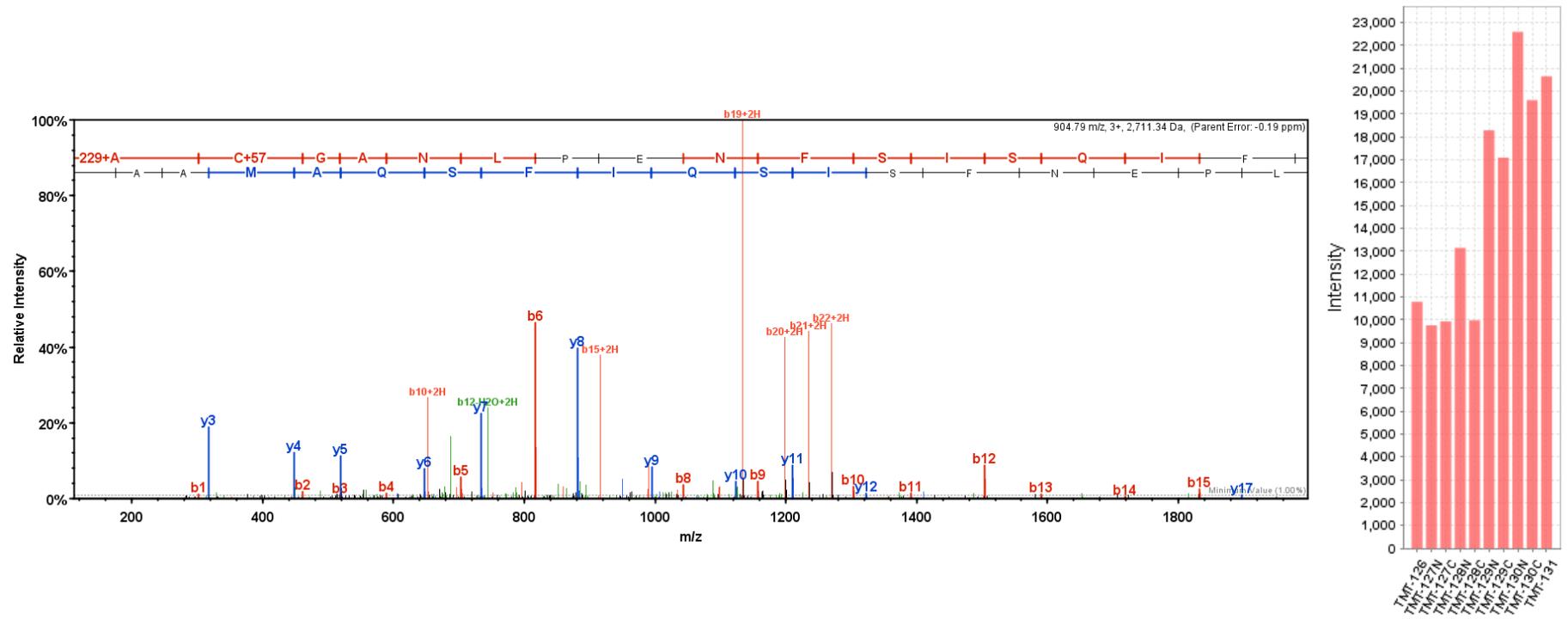


## R Session Information

```
## R version 4.0.2 (2020-06-22)
## Platform: x86_64-pc-linux-gnu (64-bit)
## Running under: CentOS Linux 7 (Core)
##
## Matrix products: default
## BLAS: /usr/local/lib64/R/lib/libRblas.so
## LAPACK: /usr/local/lib64/R/lib/libRlapack.so
##
## locale:
## [1] C
##
## attached base packages:
## [1] stats graphics grDevices datasets utils methods base
##
## other attached packages:
## [1] kableExtra_1.2.1 knitr_1.29 emmeans_1.5.0 limma_3.44.3
## [5] readxl_1.3.1 dplyr_1.0.2
##
## loaded via a namespace (and not attached):
## [1] Rcpp_1.0.5 plyr_1.8.6 highr_0.8
## [4] cellranger_1.1.0 pillar_1.4.6 compiler_4.0.2
## [7] BiocManager_1.30.10 tools_4.0.2 digest_0.6.25
## [10] viridisLite_0.3.0 evaluate_0.14 lifecycle_0.2.0
## [13] tibble_3.0.3 pkgconfig_2.0.3 rlang_0.4.7
## [16] rstudioapi_0.11 yaml_2.2.1 mvtnorm_1.1-1
## [19] xfun_0.17 stringr_1.4.0 httr_1.4.2
## [22] xml2_1.3.2 generics_0.0.2 vctrs_0.3.4
## [25] webshot_0.5.2 tidyselect_1.1.0 glue_1.4.2
## [28] R6_2.4.1 rmarkdown_2.3 purrr_0.3.4
## [31] magrittr_1.5 scales_1.1.1 ellipsis_0.3.1
## [34] htmltools_0.5.0 rvest_0.3.6 xtable_1.8-4
## [37] colorspace_1.4-1 renv_0.12.0 stringi_1.5.3
## [40] estimability_1.3 munsell_0.5.0 crayon_1.3.4
```

HYES\_MOUSE (100%) 62,516.8 Da  
 Bifunctional epoxide hydrolase 2 OS=Mus musculus OX=10090 GN=Ephx2 PE=1 SV=2

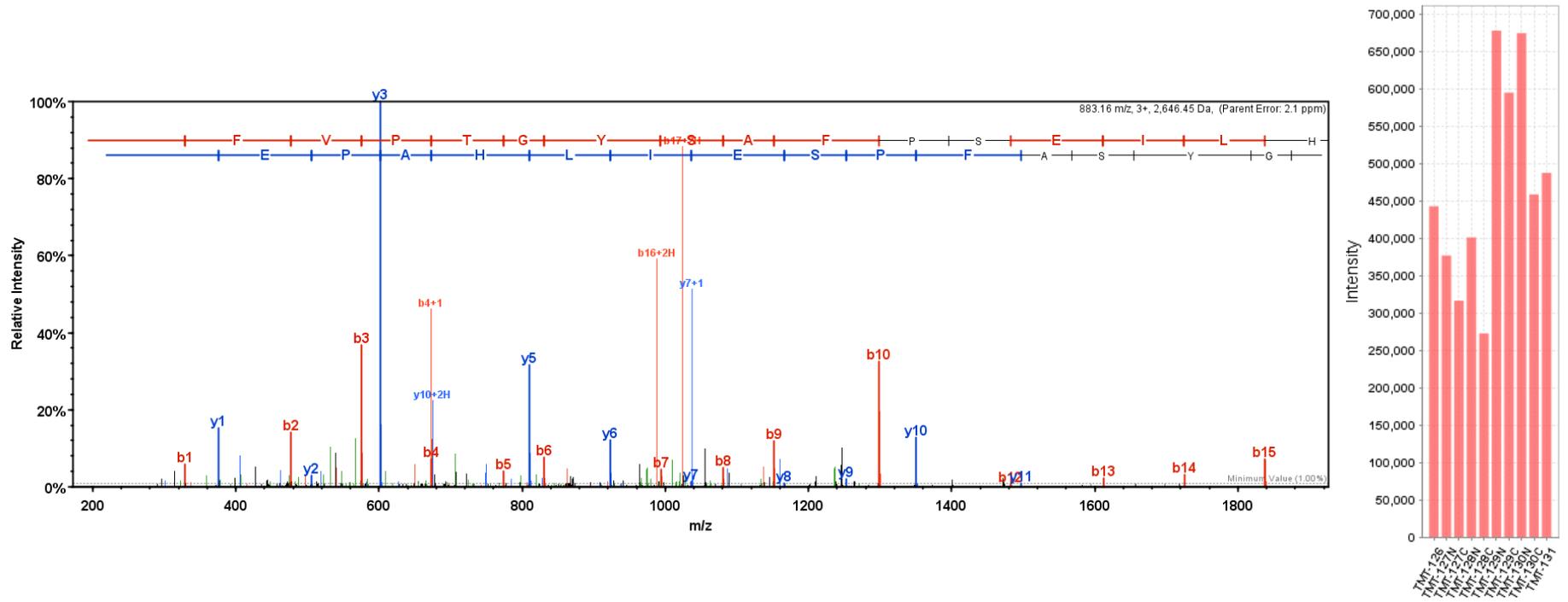
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IFSQ	AMAARS	INRPMLQAAI	ALKK	KGFTTC	IVTNN	WLDDG	DKR	DLSLAQMM	CELSQH	FDFL	IESCQV	GMIK	PEPQI	YNFLL				
VFLDD	FGSNL	KPARDMGMVT	ILVH	NTASAL	RELEK	VTGTQ	FPEAP	LPVPC	NPN	DVSHGYV	TVK	PGIRLHF	VEMGSG	PALC				
SWRY	QIPALA	QAGFR	VLAID	MKG	YGDSSSP	PEIEEY	AMEL	LCKEM	VTFLD	KLGI	PQAVFI	GHDWAG	VMMVW	NMALFY	PERV			
MPPD	PDVSPM	KVIR	SIPVFN	YQLY	FQEPGV	AEAELE	KNMS	RTFK	SFFRAS	DETF	FI	AVHK	ATEIG	GILVN	TPEDPN	LSKI		
QQFK	KTGFRG	PLN	WYRNTER	NWKWS	CKGLG	RKIL	VPALMV	TAEK	DIVLRP	EMSK	NMEKWI	PFLKR	GHIED	CGHWT	QIEKP	TEVNL	QILIKW	
LQTEV	QNPSV	TSKI																



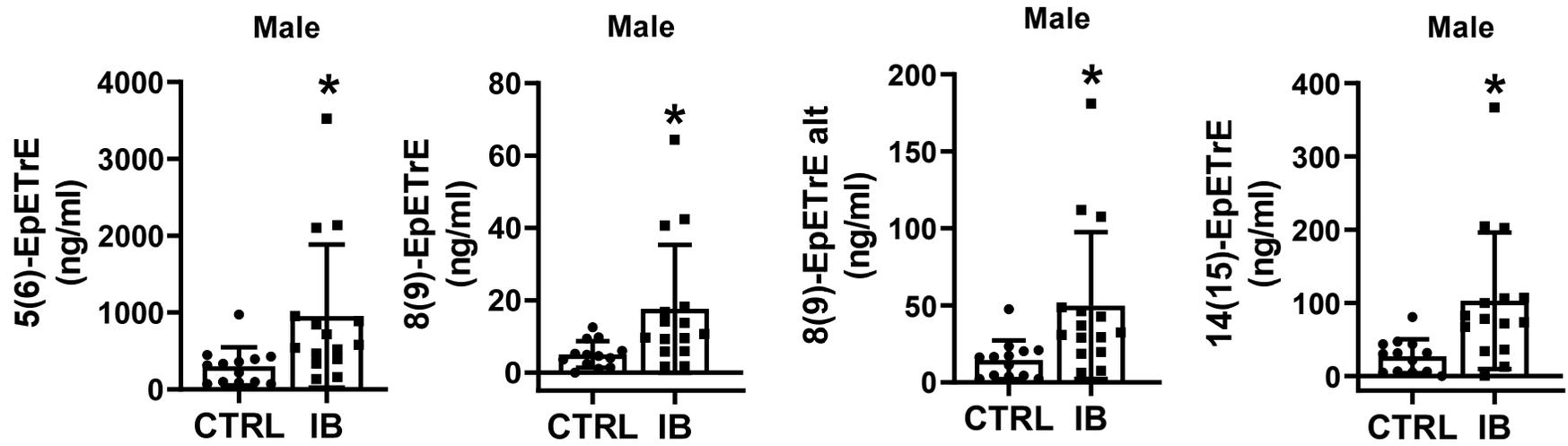
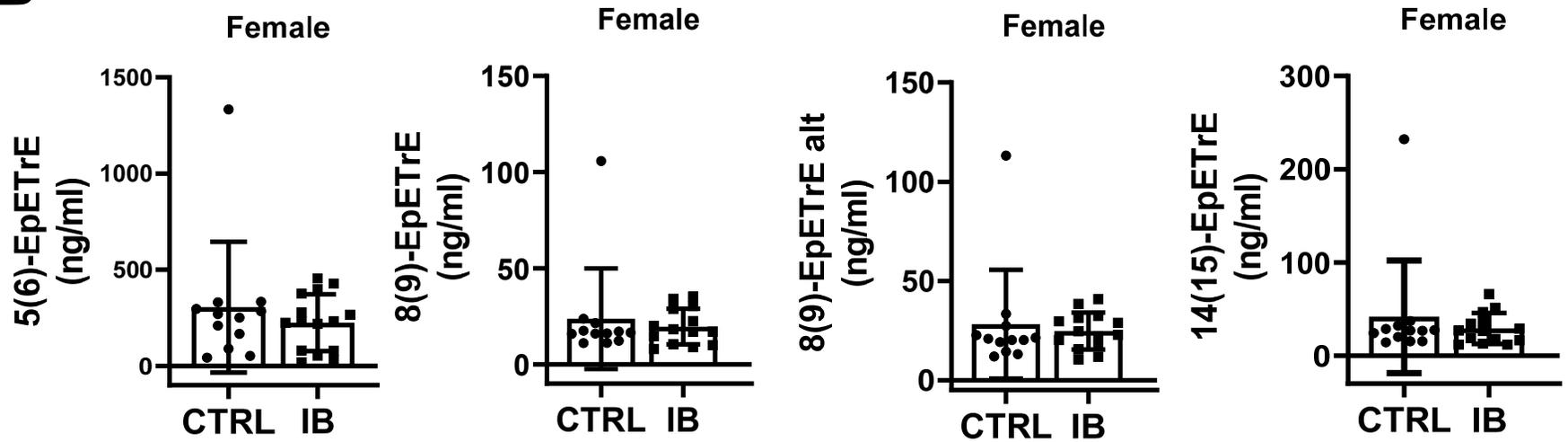
Supplemental Figure 1.

HYEP\_MOUSE (100%) 52,578.7 Da  
 Epoxide hydrolase 1 OS=Mus musculus OX=10090 GN=Ephx1 PE=1 SV=2

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 KKVVSFWRNE FDWRKQVEIL NQYPHFKTKI EGLDIHFHIV KPPQLPSGR PKPLLMVHGW PGSFYEFYKI IPLLTDPKTH GLSDEHVFEV  
 ICPSIPGYGF SEASSK KGLN SVATARIFYK LMSRLGFQKF YIQGGDWGSL ICTNIAQMVP NHVKGLHLNM SFISRNIYSL TPLLQGRFGR  
 FLGYTEK DLE LLYPFK EKVF YNIMRESGYL HIQATKPDTV GCALNDSPVG LAAYILEKFS TWTKSEYREL EDGGLERKFS LEDLLTNIMI  
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 LAELQ

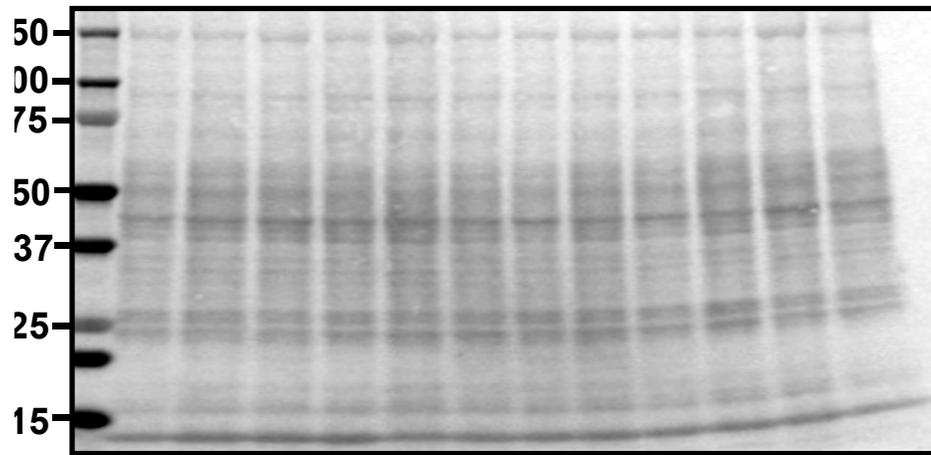


Supplemental Figure 2.

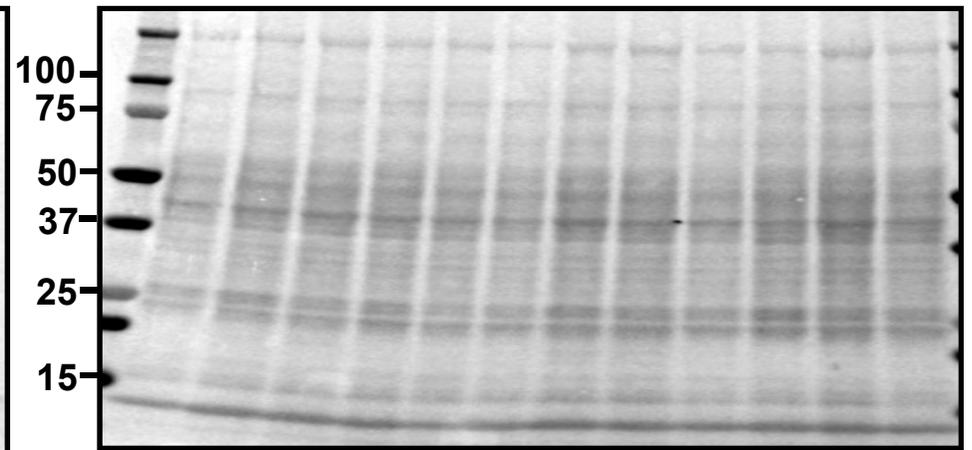
**A****B**

Supplemental Figure 3

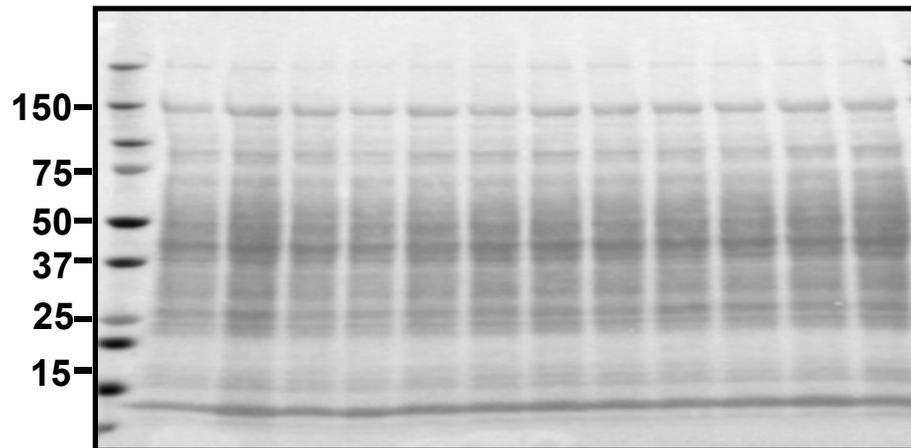
**Male sEH Ponceau**



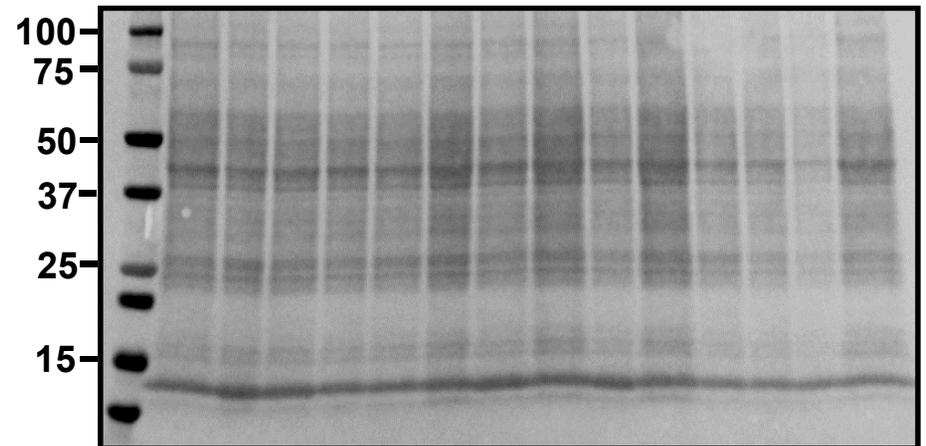
**Male mEH Ponceau**



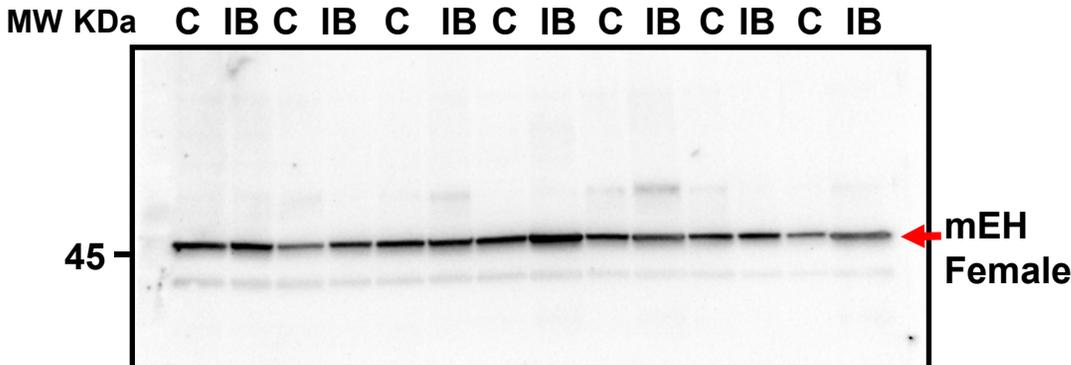
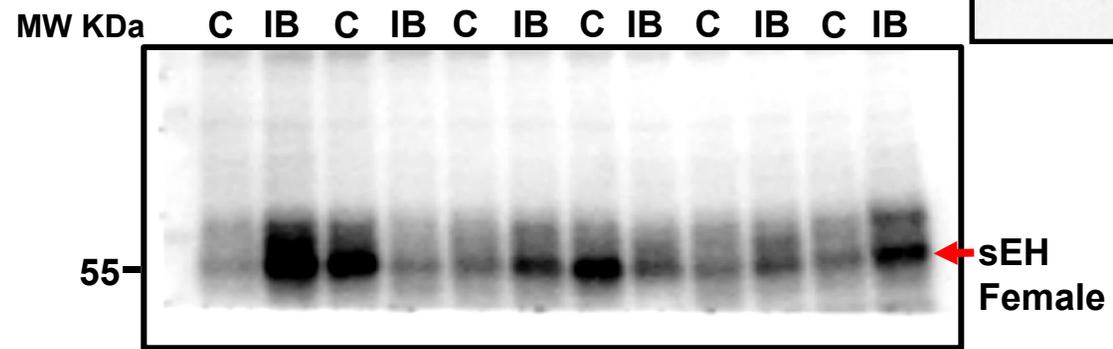
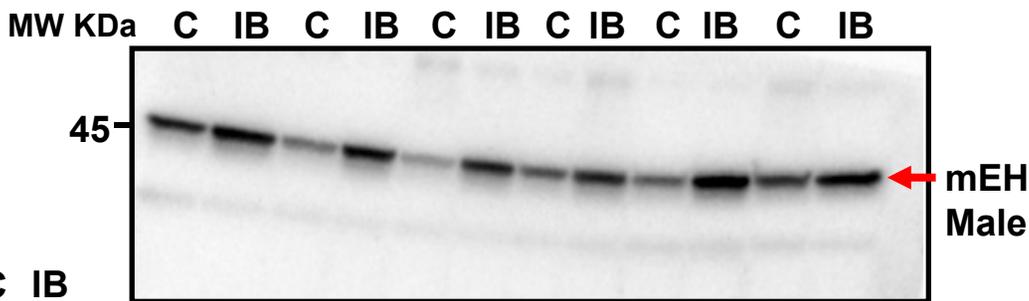
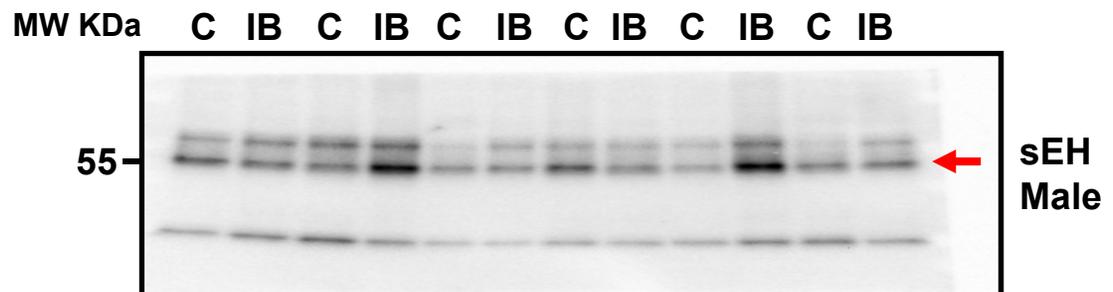
**Female sEH Ponceau**



**Female mEH Ponceau**



Supplemental Figure 4.



Supplemental Figure 5.