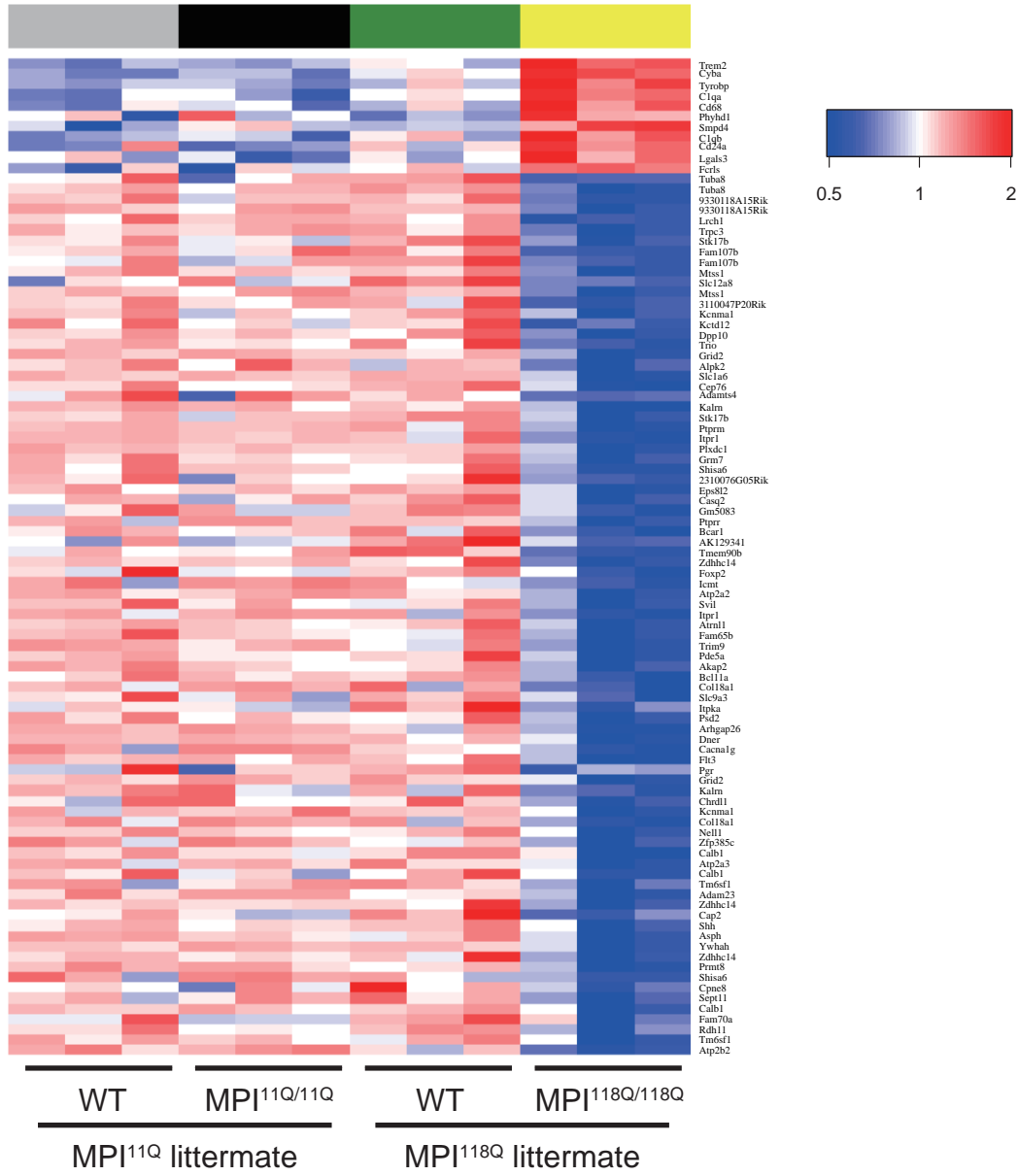
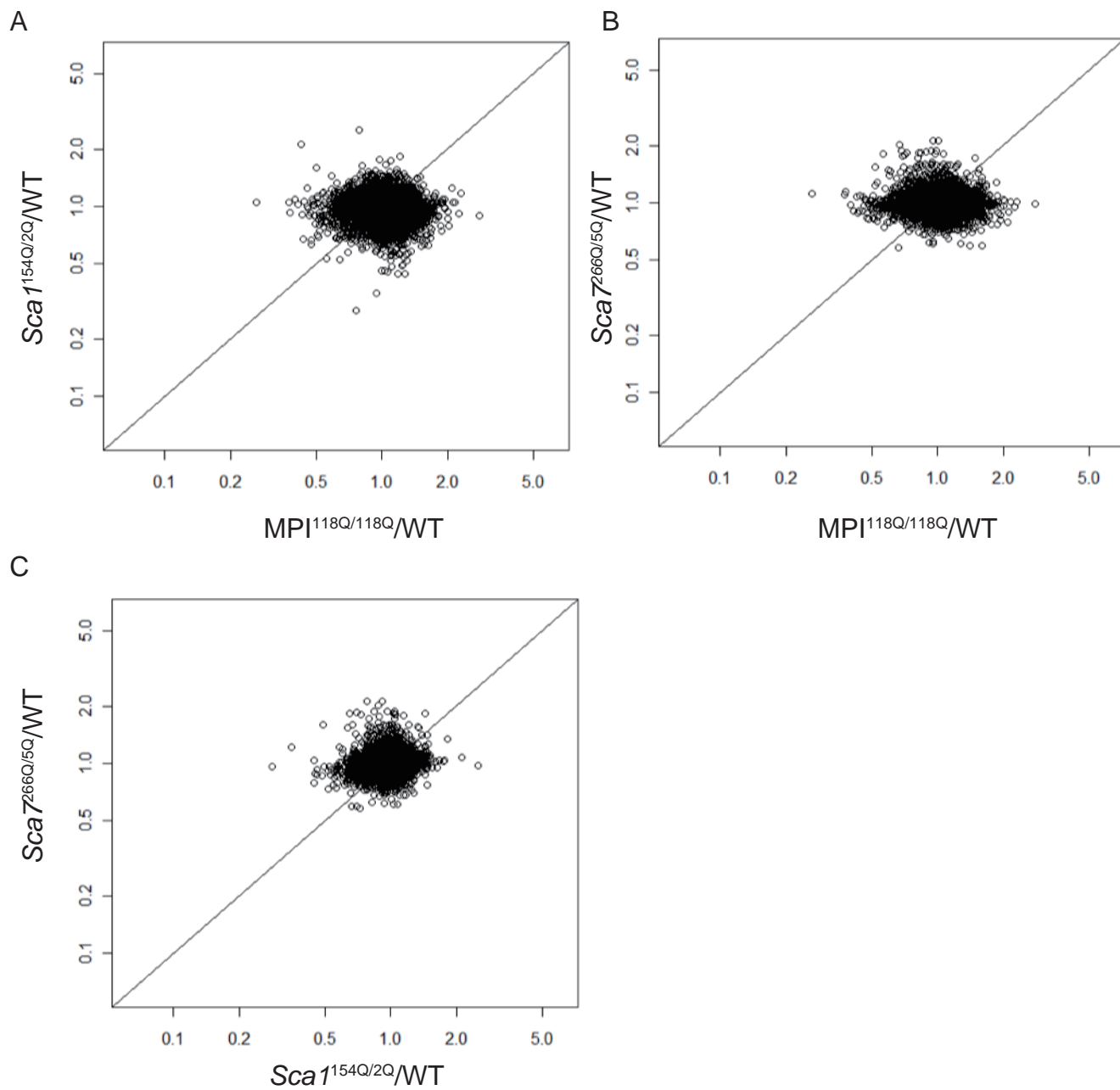


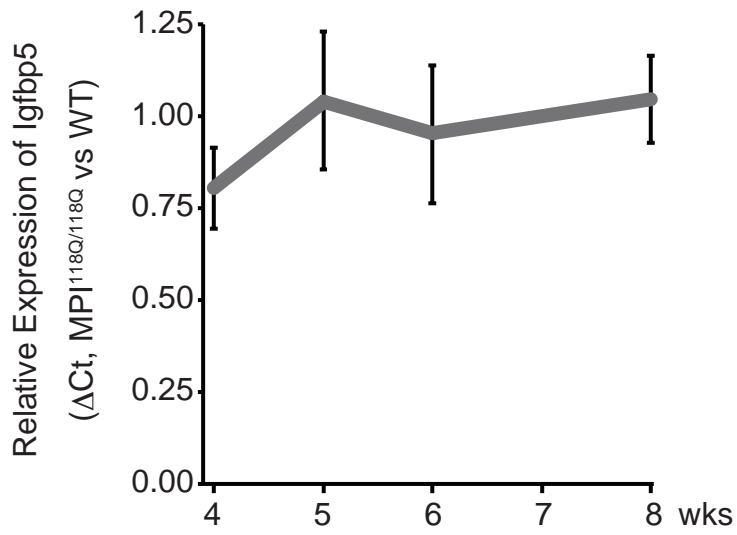
Supplemental Figure 1



Supplemental Figure 3



Supplemental Figure 4



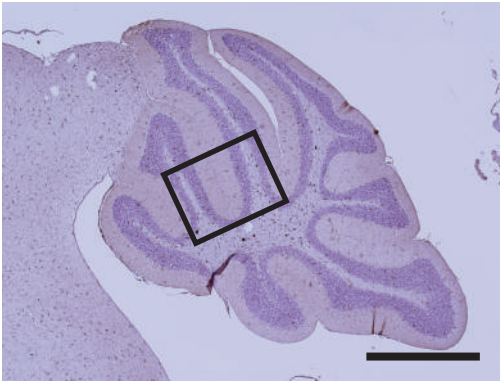
Supplemental Figure 5

Sca1

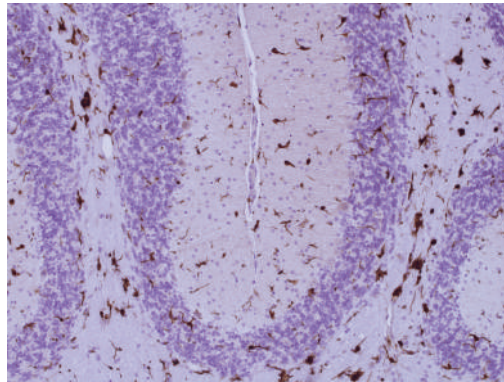
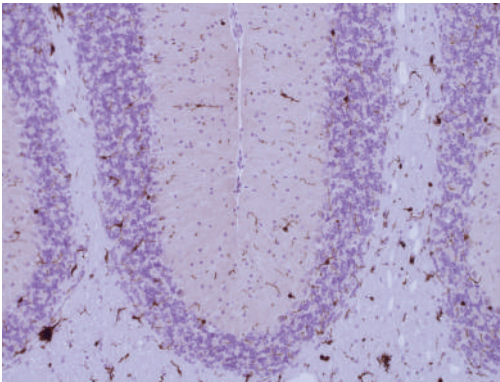
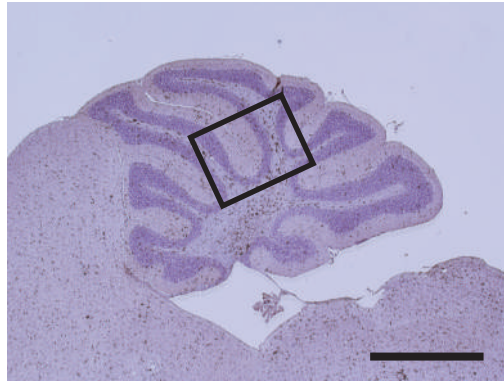
| Gene Ontology term | P-value |
|--|---------|
| BEHAVIOR | < 0.001 |
| RHODOPSIN_LIKE_RECEPTOR_ACTIVITY | < 0.001 |
| LOCOMOTORY_BEHAVIOR | < 0.001 |
| PEPTIDE_RECEPTOR_ACTIVITY | < 0.001 |
| POSITIVE_REGULATION_OF_TRANSLATION | < 0.001 |
| G_PROTEIN_COUPLED_RECEPTOR_ACTIVITY | < 0.001 |
| EXTRACELLULAR_SPACE | < 0.001 |
| DIGESTION | 0.004 |
| CHEMOKINE_RECEPTOR_BINDING | 0.001 |
| LIPASE_ACTIVITY | 0.001 |
| POSITIVE_REGULATION_OF_CYTOKINE_BIOSYNTHETIC_PROCESS | < 0.001 |
| RESPONSE_TO_EXTERNAL_STIMULUS | < 0.001 |
| CHEMOKINE_ACTIVITY | 0.001 |
| AMINE_RECEPTOR_ACTIVITY | 0.001 |
| G_PROTEIN_COUPLED_RECEPTOR_PROTEIN_SIGNALING_PATHWAY | < 0.001 |
| SECOND_MESSENGER_MEDIATED_SIGNALING | < 0.001 |
| G_PROTEIN_COUPLED_RECEPTOR_BINDING | < 0.001 |
| INFLAMMATORY_RESPONSE | < 0.001 |
| FEEDING_BEHAVIOR | 0.012 |
| DEFENSE_RESPONSE | < 0.001 |
| CATION_HOMEOSTASIS | 0.001 |
| CARBOXYLESTERASE_ACTIVITY | 0.004 |
| RESPONSE_TO_WOUNDING | < 0.001 |
| INTERLEUKIN_BINDING | 0.006 |
| CELLULAR_CATION_HOMEOSTASIS | 0.001 |
| GLYCOSAMINOGLYCAN_BINDING | 0.005 |
| RNA_HELICASE_ACTIVITY | < 0.001 |
| ATP_DEPENDENT_HELICASE_ACTIVITY | < 0.001 |
| RESPONSE_TO_HYPOXIA | < 0.001 |
| GOLGI_MEMBRANE | < 0.001 |
| NUCLEAR_HORMONE_RECEPTOR_BINDING | 0.004 |
| HORMONE_RECEPTOR_BINDING | < 0.001 |
| TRANSPORT_VESICLE | < 0.001 |
| RNA_SPLICINGVIA_TRANSESTERIFICATION_REACTIONS | < 0.001 |
| NUCLEAR_PORE | 0.005 |
| DNA_DIRECTED_RNA_POLYMERASEII_HOLOENZYME | < 0.001 |

Supplemental Figure 6

Sca6^{14Q/14Q}

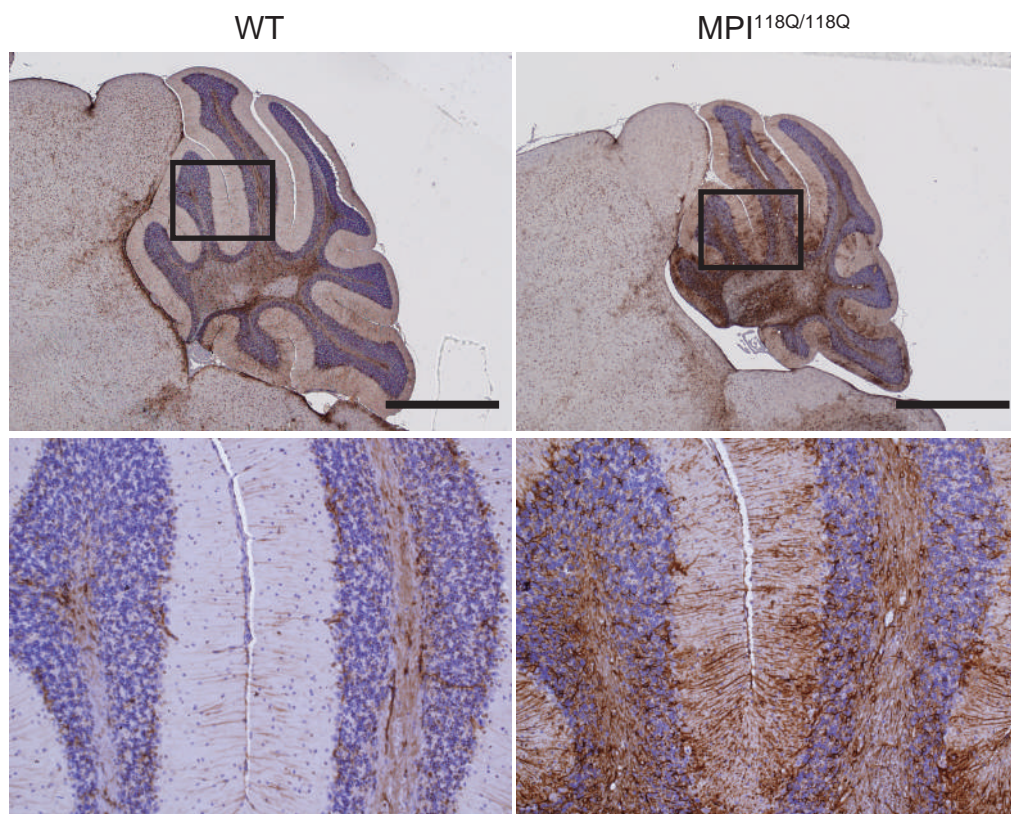


Sca6^{68Q/84Q}

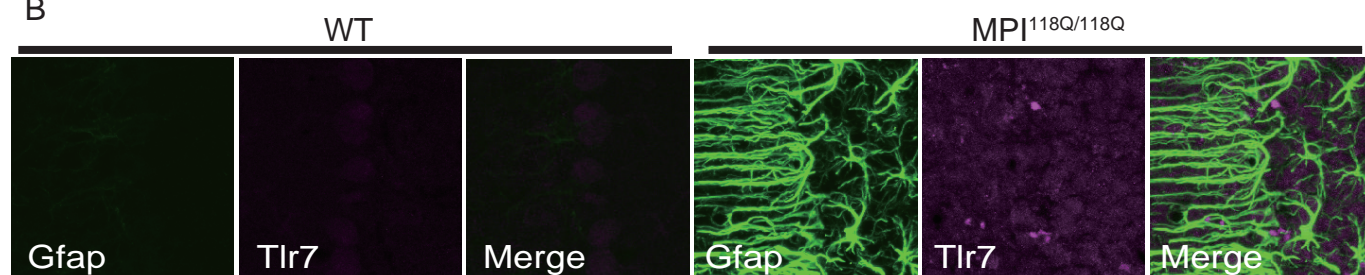


Supplemental Figure 7

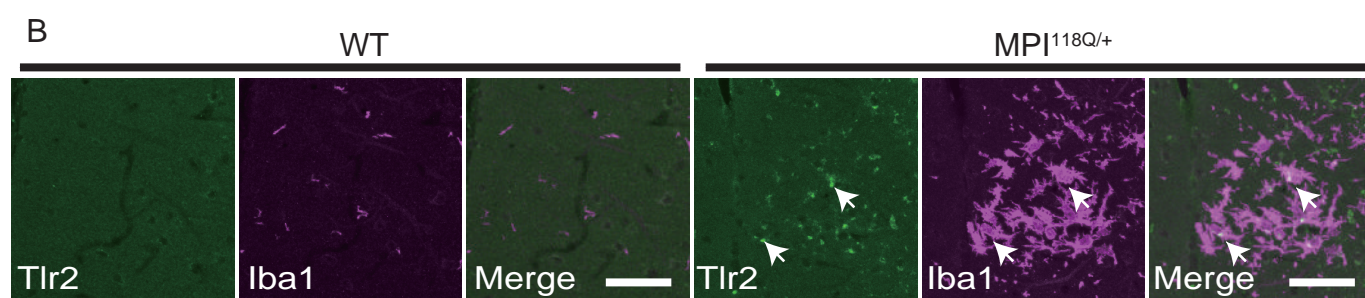
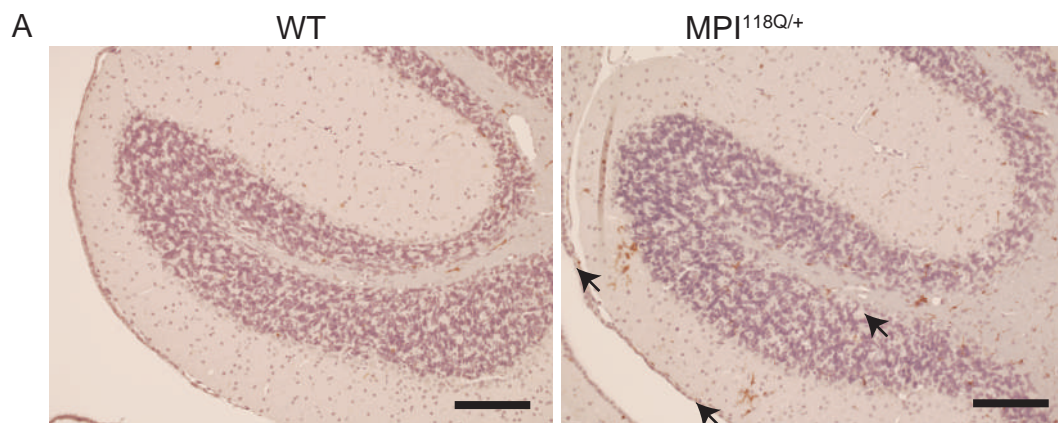
A



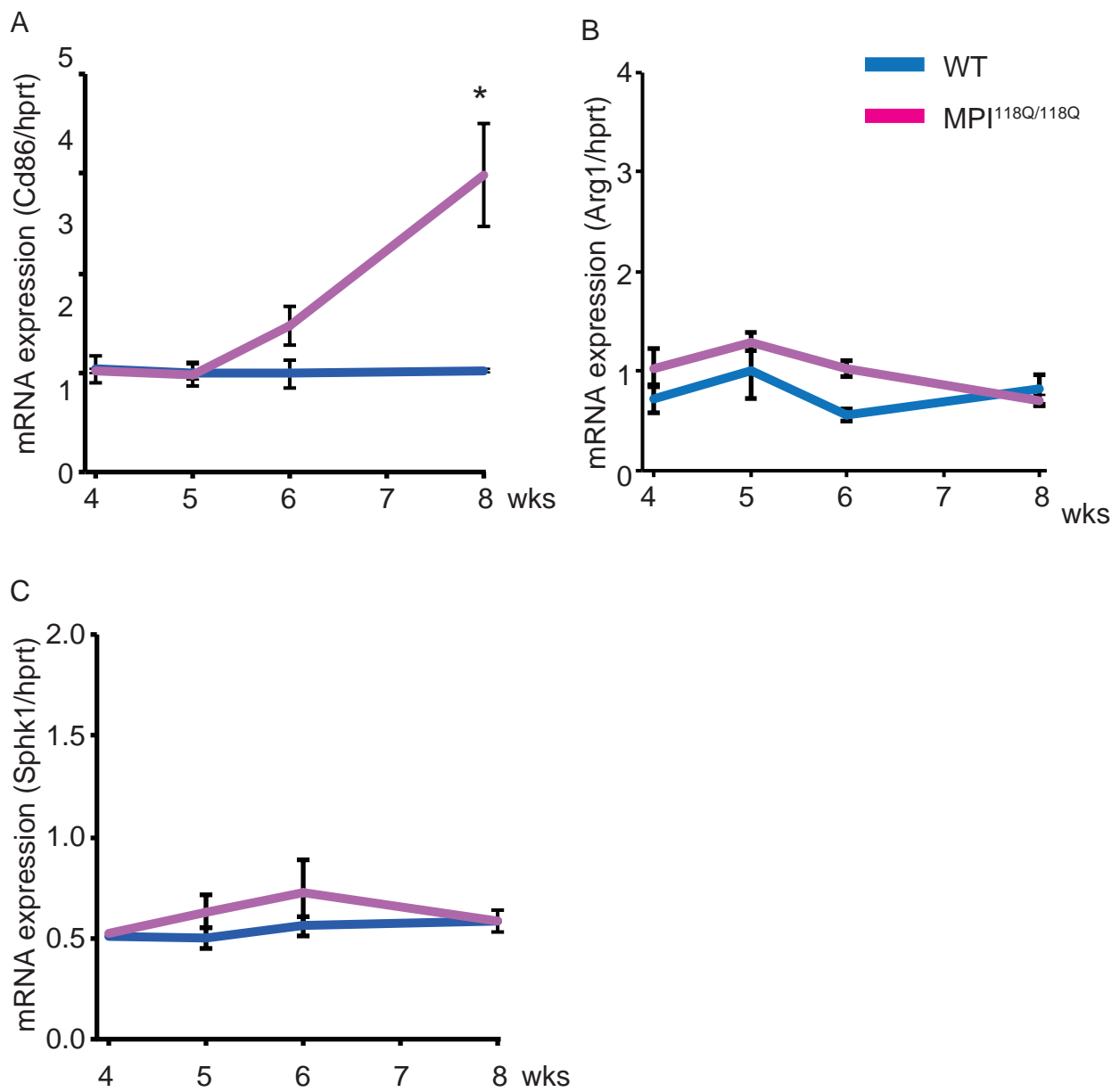
B



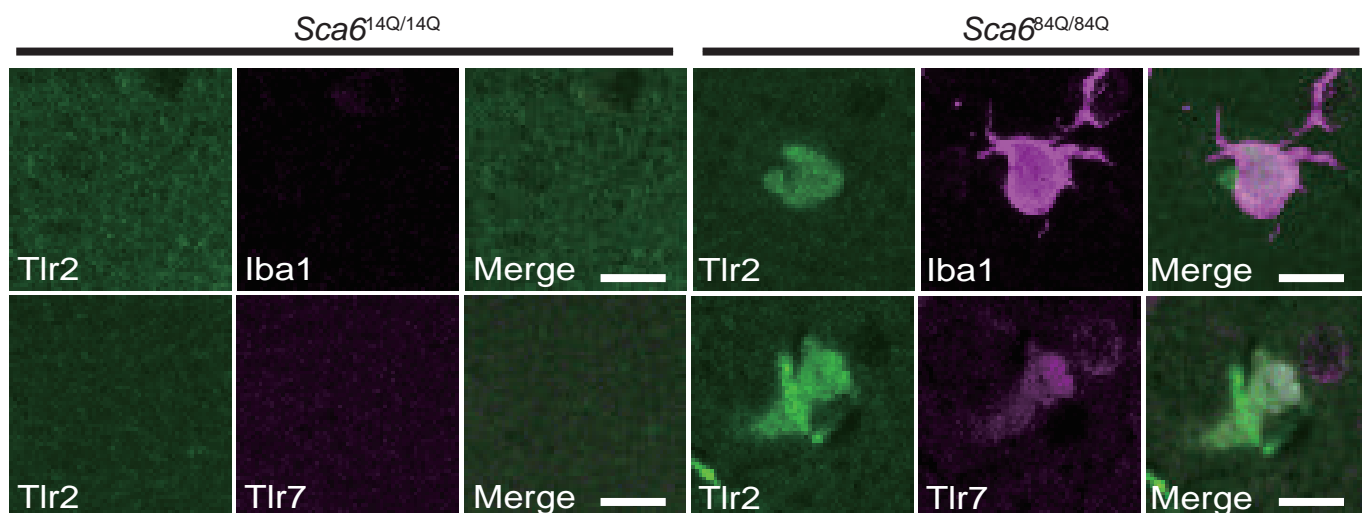
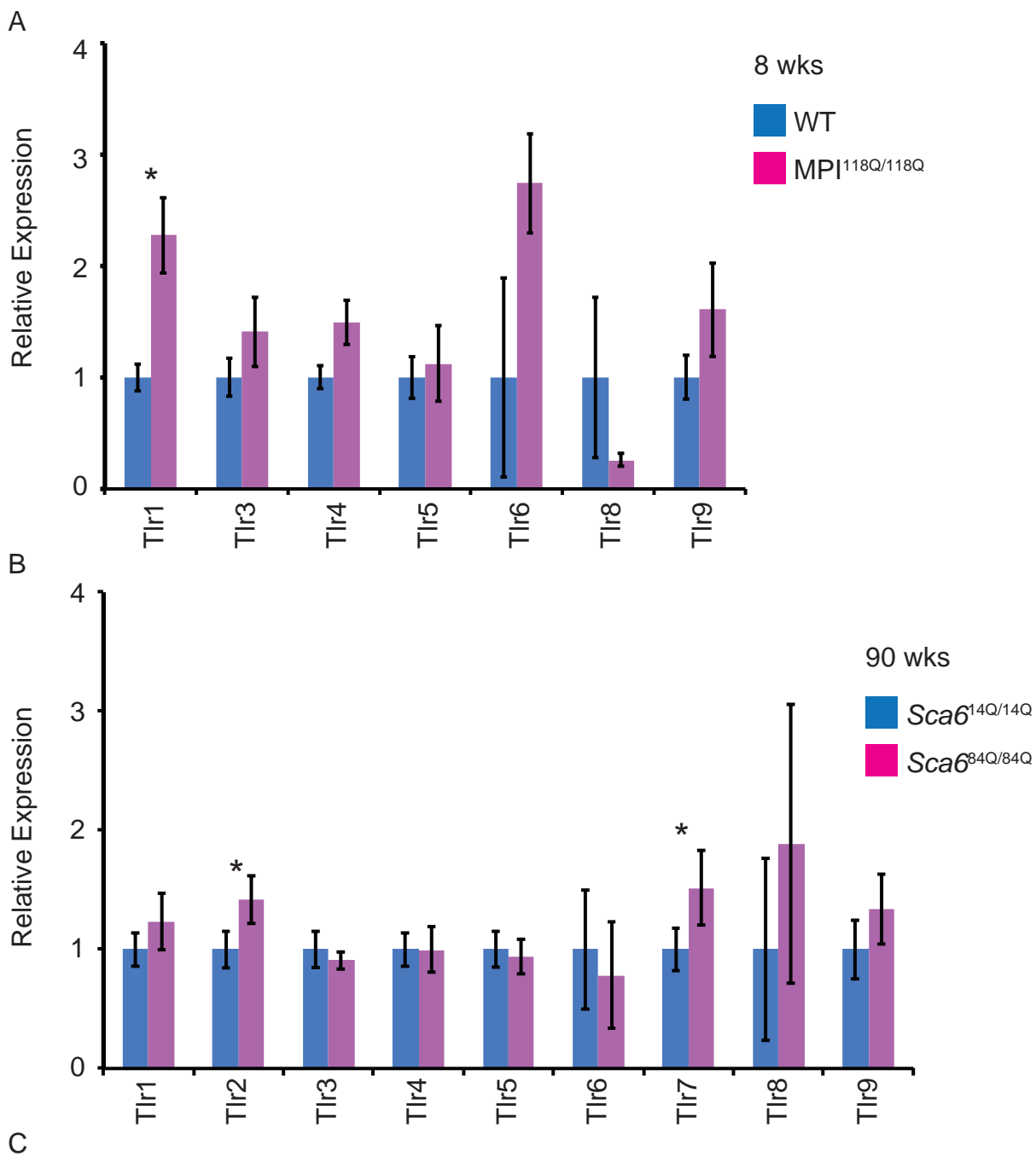
Supplemental Figure 8



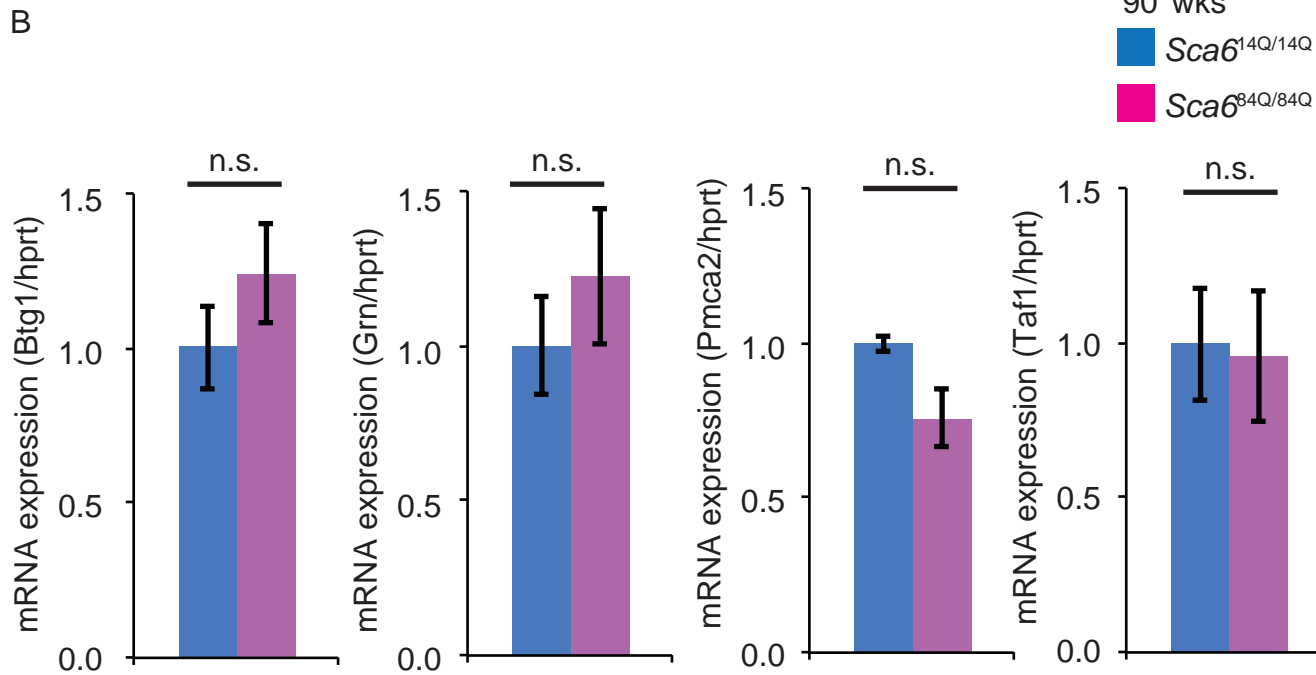
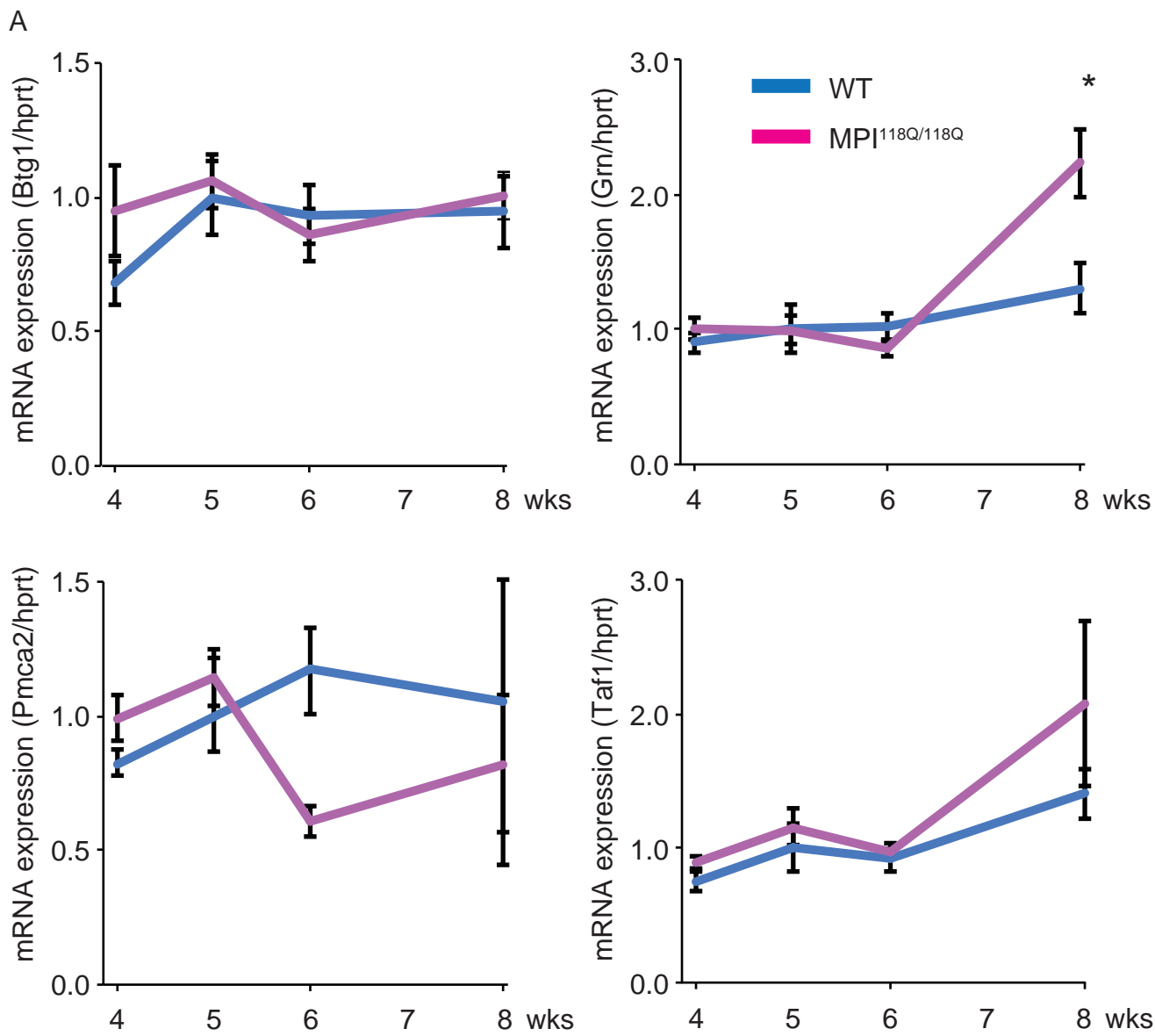
Supplemental Figure 9



Supplemental Figure 10

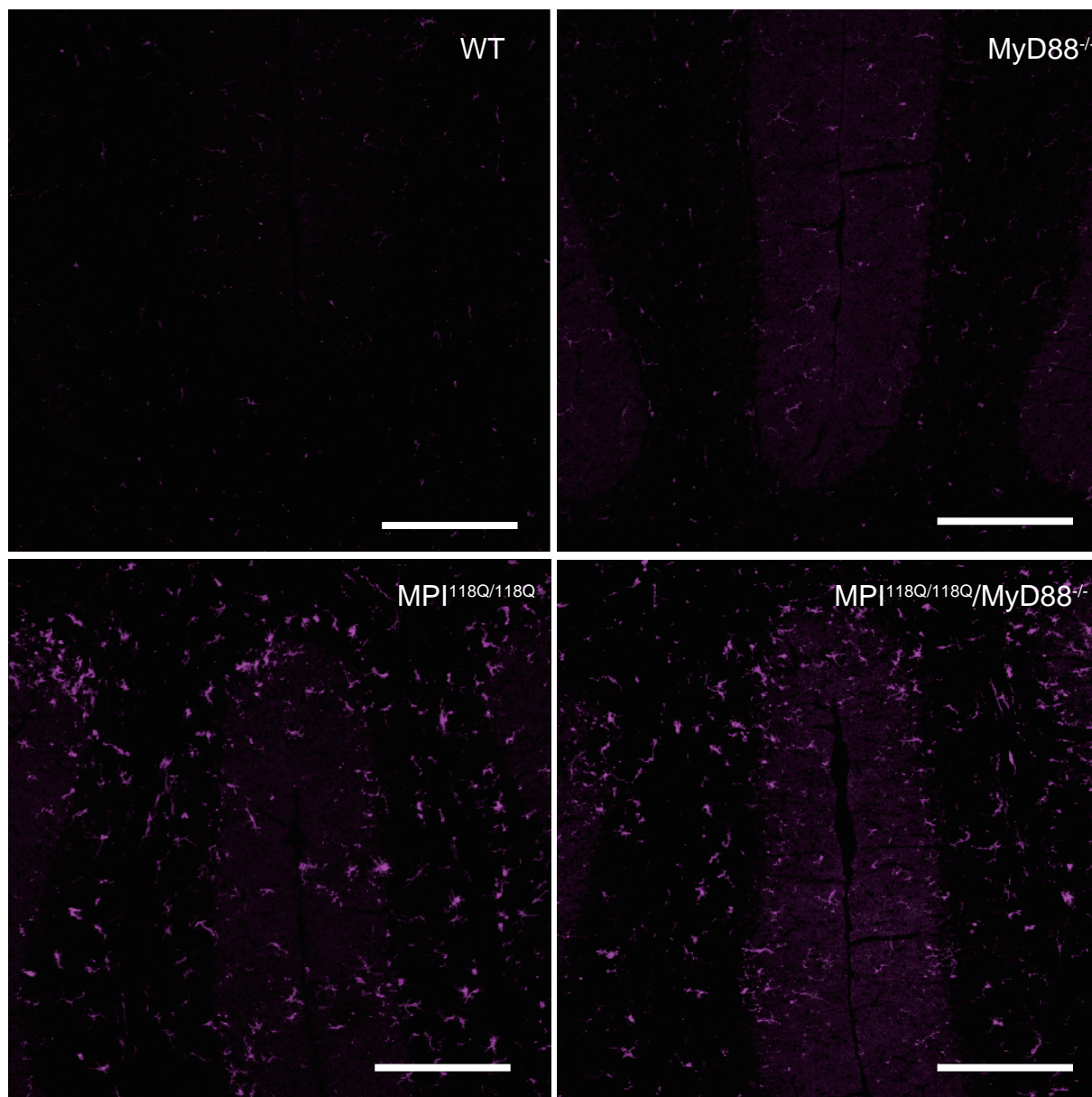


Supplemental Figure 11

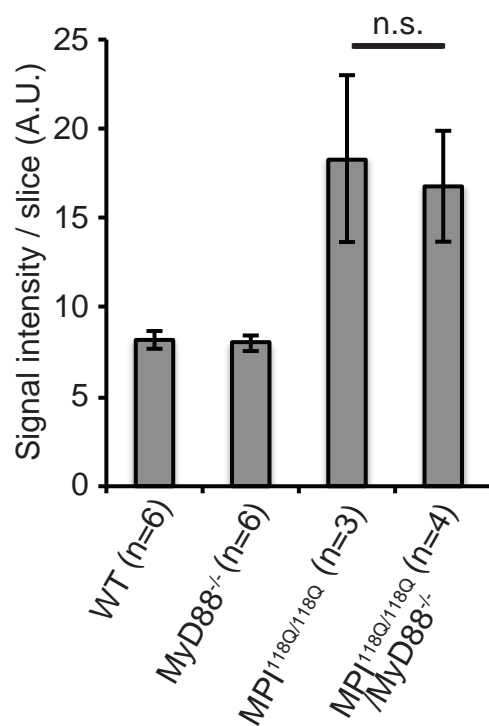


Supplemental Figure 12

A

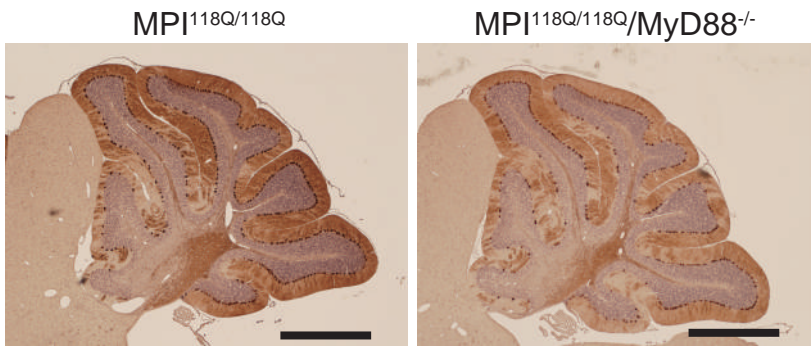


B



Supplemental Figure 13

A



B

