CX3CR-1GFP transgenic mice (B6.129P2(Cg)-Cx3cr1tm1Litt/J; Jax stock number: 005582)

The CX3CR-1GFP knock-in/knock-out mice express EGFP in monocytes, dendritic cells, NK cells, and brain microglia under control of the endogenous Cx3cr1 locus. These mice may be useful in studies of leukocyte migration and trafficking, as well as for transplantation studies.

Overview

The $CX^3CR\text{-}1^{GFP}$ knock-in/knock-out mice have an enhanced green fluorescent protein (EGFP) sequence replacing the first 390 bp of the coding exon (exon 2) of the chemokine (C-X3-C motif) receptor 1 (Cx3cr1) gene. RT-PCR analysis of lymphoid tissue from homozygotes detects mutant gene product (mRNA) and no wild type gene product (mRNA). Flow cytometric analysis of peripheral blood cells identified a subset of green fluorescent cells not observed in wildtype mice. EGFP, but not the endogenous gene, is expressed in monocytes, dendritic cells, NK cells, and brain microglia - mimicking endogenous gene expression. The same subset of peripheral blood cells isolated from heterozygote mice express detectable levels of EGFP. These $CX^3CR\text{-}1^{GFP}$ mutant mice may be useful in studies of leukocyte migration and trafficking, as well as for transplantation studies.

Note: Shipping costs and logistics will be managed by JAX upon order approval.

References

1. Jung S, Aliberti J, Graemmel P, et al. , https://pubmed.ncbi.nlm.nih.gov/10805752/

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