

Docket #: S17-089

MRP8-Cre-IRES/GFP,Mrp8creTg

Mice hemizygous for the MRP8-Cre-ires/GFP transgene are viable and fertile, with the human S100 calcium binding protein A8 (calgranulin A) (MRP8 or S100A8) promoter directing bicistronic Cre and EGFP protein expression to granulocytes and granulocyte/macrophage progenitors (GMPs). EGFP fluorescence and cre expression is evident in hemizygotes in 20% of granulocyte/macrophage progenitors (GMPs) and 100% of granulocytes during myeloid differentiation. When bred with mice containing a loxP-flanked sequence of interest, the resulting offspring can have Cre-mediated recombination of the flanked sequence in these cells.

The MRP8-Cre-ires/GFP transgene was designed to place a Cre recombinase gene, internal ribosomal entry site (IRES), and an enhanced green fluorescent protein (EGFP) gene all downstream of the human S100 calcium binding protein A8 (calgranulin A) (MRP8 or S100A8) promoter. This transgene was microinjected into the pronucleus of (C57BL/6 x C3H)F1 fertilized oocytes. Resulting transgenic mice were bred to C57BL/6J mice for at least 9 generations. Upon arrival at The Jackson Laboratory, mice were bred to C57BL/6J (Stock No. 000664) for at least one generation to establish the colony.

Deposited at Jackson Labs Stock No. 21614

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