

floxEP4B6 (Breyer)

VCMR supporting info

Detailed description: Prostaglandin E2 (PGE2), a fatty acid derivative and a primary target of NSAIDs, is important in diverse physiological processes, including but not limited to: contraction and relaxation of smooth muscle, vasodilation, vasoconstriction, blood pressure regulation, immune response and inflammation regulation and bone formation and healing. There are four receptors for PGE2. The *Ptger4* gene encodes a G-protein coupled PGE2 receptor (EP4), which is essential for embryonic development and neonatal survival in mice.

These mice possess *loxP* sites on either side of exon 2 of the targeted gene. Mice that are homozygous for this allele are viable and fertile. When these mutant mice are bred to mice that express Cre recombinase, resulting offspring will have exon 2 deleted in the *cre*-expressing tissues. Removal of the floxed sequence creates a null allele. During backcrossing, the Y chromosome may not have been fixed to the C57BL/6J genetic background.