

Bmx Cre ERT2 Mouse

Catalogue number: 151454

Sub-type: Mouse

Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Bmx Cre ERT2 Mouse

Alternate name:

Class:

Conjugate:

Description: The estragen receptor (ERT2) under the Bone marrow x (Bmx) promoter (Bmx-Cre-ERT2) mouse exhibits tissue-specific expression of an inducible Cre-ERT2 fusion protein, enabling tamoxifen-induced Cre recombinase activity in arterial endothelial cells. The Bmx-Cre-ERT2 mouse is an ideal tool in the study of gene function in angiogenesis, atherosclerosis and neovascularisation. Administration of tamoxifen induces nuclear translocation of the Cre-ERT2 fusion protein, and subsequent Cre recombinase activity, allowing knockout/knockin/transgene studies of loxP flanked genes in endothelial cells. Non-induced Bmx-Cre-ERT2 mice demonstrate no Cre recombinase activity, while tamoxifen-induced Bmx-Cre-ERT2 mice demonstrate high penetrance in endothelial cells (95%+), significantly higher than existing endothelial Cre models currently available.

Purpose:

Parental cell:

Organism:

Tissue:

Model: Conditional KO

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details: A Bmx-Cre-ERT2 transgene vector, containing a genomic VECad promoter fragment fused to a Cre-ERT2 cDNA, was injected into fertilised embryos (C57BL/6 or FVB/N). Founder lines were back-crossed to establish mice heterozygous for the Bmx-Cre-ERT2 transgene.

Formulation:**Recommended controls:****Bacterial resistance:****Selectable markers:****Additional notes:**

Target details

Target: BMX, CreERT2

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application:

Application notes:

Handling

Format:

Concentration:

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

Storage conditions:

Shipping conditions: Embryo/Spermatozoa- Dry Ice

Related tools

Related tools:

References

References: Maeda K et al. Dendritic Cells. 1996. 6: 43-9 ; Maeda et al. 2002. J Histochem Cytochem. 50(11):1475-86. PMID: 12417613. ; Immunohistochemical recognition of human follicular dendritic cells (FDCs) in routinely processed paraffin sections. ; Ling et al. 1998. Clin Exp Immunol. 113(3):360-6. PMID: 9737663. ; Origin and properties of soluble CD21 (CR2) in human blood. ; Johnson et al. 1986. Clin Exp Immunol. 64(1):205-13. PMID: 3524917. ; Human follicular dendritic cells (FDC): a study with monoclonal antibodies (MoAb).

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