

Endoglin Floxed Mouse

Catalogue number: 151754

Sub-type: Mouse

Images:

Contributor

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Institute: Newcastle University

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Endoglin Floxed Mouse

Alternate name:

Class:

Conjugate:

Description: Endoglin is an auxiliary receptor for TGF β signalling. Heterozygous germline Endoglin mutations have been identified in patients with the vascular abnormality, Hereditary Haemorrhagic Telangiectasia. Endoglin is upregulated in endothelial cells during angiogenesis and the loss of Endoglin in [transgenic] mice results in embryonic lethality at mid-gestation. This phenotype points to an important role of Endoglin in new blood vessel formation but precludes analysis at later stages in development and in postnatal life. To bypass this limitation and allow further investigations of the function of Endoglin a transgenic mice has been generated with a floxed Endoglin allele in which loxP sites flank exons 5 and 6. Mice homozygous for this allele are normal and in the presence of appropriate Cre lines will allow time and cell specific Endoglin deletion for in vivo analysis of function in cardiovascular development and disease.

Purpose:

Parental cell:

Organism:

Tissue:

Model: Conditional KO

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details: Targeting the endoglin gene with trifloxed (3fl) eng vector by homologous recombination in mouse ES cells. Endoglin exons 5 and 6 and a PGK-neo selection cassette are flanked by loxP sites. The neo cassette was removed from heterozygous Eng3fl/?Ž mice in vivo using the Meu-Cre40 transgenic mouse. These mosaics were then crossed with wild type C57Bl/6 females to generate F2 mice and all possible recombination events were observed in the F2 generation. F2 mice had inherited the floxed Endoglin allele, but not the Meu-Cre40 transgene.

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: Endoglin

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: Labit et al. 2012. EMBO J. 31(15):3351-62. PMID: 22713866. ; Dephosphorylation of Cdc20 is required for its C-box-dependent activation of the APC/C.