

# CDH5(PAC)CreERT2 Mouse

**Catalogue number:** 151520

**Sub-type:** Mouse

**Images:**

## Contributor

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**Images:**

## Tool details

**\*FOR RESEARCH USE ONLY**

**Name:** CDH5(PAC)CreERT2 Mouse

**Alternate name:**

**Class:**

**Conjugate:**

**Description:** Cdh5(PAC)-CreERT2 enable efficient inducible conditional recombinase expression in embryonic and adult endothelial cells (tissue-specific loxP knockout/knockin/transgene). The Cdh5(PAC)-CreERT2 mouse is an ideal tool in the study of gene function in angiogenesis, atherosclerosis and neovascularisation.

**Purpose:**

**Parental cell:**

**Organism:**

**Tissue:**

**Model:** Conditional KO

**Gender:**

**Isotype:**

**Reactivity:**

**Selectivity:**

**Host:**

**Immunogen:**

**Immunogen UNIPROT ID:**

**Sequence:**

**Growth properties:**

**Production details:** A Cdh5(PAC)-CreERT2 transgene vector, containing a genomic Cdh5(PAC) promoter fragment fused to a CreERT2 cDNA, was injected into fertilised embryos (C57BL/6 or FVB/N). Founder lines were back-crossed to establish mice heterozygous for the Cdh5(PAC)-CreERT2

transgene.

**Formulation:**

**Recommended controls:**

**Bacterial resistance:**

**Selectable markers:**

**Additional notes:** The Cdh5(PAC)-CreERT2 mouse exhibits tissue-specific expression of an inducible Cre-ERT2 fusion protein, enabling tamoxifen-induced Cre recombinase activity in vascular endothelial cells. 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 vascular endothelial cells. Non-induced Cdh5(PAC)-CreERT2 mice demonstrate no Cre recombinase activity, while tamoxifen-induced Cdh5(PAC)-CreERT2 mice demonstrate high penetrance in vascular endothelial cells (95%+).

## Target details

**Target:** Estrogen receptor (ERT2) under the vascular endothelial cadherin (Cdh5(PAC)) promoter.

**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:** Mercer et al. 2005. Cancer Res. 65(24):11493-500. PMID: 16357158.

CancerTools.org