Hprt-CAG-LSL-KD2:ER Mouse

Catalogue number: 153298
Sub-type: Mouse
Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Hprt-CAG-LSL-KD2:ER Mouse

Alternate name: Rho-associated protein kinase 2, Rho-associated coiled-coil-containing protein kinase 2, ROCK-II, Hypoxanthine phosphoribosyltransferase, HPRT, CAG, chicken actin gene, KD, Kinase dead,

Class:
Conjugate:
Description: Rho associated coiled-coil containing protein kinases (ROCKs) exist in mammals, zebrafish, Xenopus, C. elegans and Drosophila. They are mainly involved in regulating the shape and movement of cells through acting on the cytoskeleton. Two mouse ROCK isoforms ROCK1 and ROCK2 have been identified. ROCK1 is mainly expressed in the lung, liver, spleen, kidney and testis and ROCK2 is distributed mostly in the brain and heart. ROCK2, an isoenzyme of ROCK1, is a serine/threonine kinase and regulates cytokinesis, smooth muscle contraction, the formation of actin stress fibers and activation of the c-fos serum response element.
Purpose:
Parental cell:
Organism:
Tissue:
Model: Transgenic
Gender:
Isotype:
Reactivity:
Selectivity:
Host:
Immunogen:
Immunogen UNIPROT ID:
Sequence:

Growth properties:
Production details: Kinase dead version has a single amino acid mutation (K125G) that blocks ATP-binding and kinase catalytic activity
Formulation:
Recommended controls:
Bacterial resistance:
Selectable markers:
Additional notes: This strain can be crossed with mice expressing Cre recombinase under the transcriptional control of tissue specific promoters to restrict GFP:KD2:ER expression to tissues of choice.

Target details

Target: Hprt gene-targeted Cre-inducible, tissue-specific expression of GFP:KD2 (kinase dead ROCK2)

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application: This strain can be crossed with mice expressing Cre recombinase under the transcriptional control of tissue specific promoters to restrict GFP:KD2:ER expression to tissues of choice.
Application notes:

Handling

Format:
Concentration:
Passage number:
Growth medium:
Temperature:
Atmosphere:
Volume:
Storage medium:
Storage buffer:
Storage conditions:
Shipping conditions: Embryo/Spermatoza- Dry Ice

Related tools

Related tools: Hprt-CAG-LSL-ROCK2:ER Mouse

References

References: Sabapathy et al. 2019. J Mol Cell Biol. 11(4):317-329. PMID: 30907951. ; Eng et al. 2016. Protein Eng Des Sel. 29(1):11-21. PMID: 26508747. ; Mayelzadeh et al. 2007. Oncogene. 26(21):2955-63. PMID: 17130840. ; Lane et al. 1996. Oncogene. 12(11):2461-6. PMID: 8649788. ; Yewdell et al. 1986. J Virol. 59(2):444-52. PMID: 2426467.