# **ROCK2 Floxed Mouse**

Catalogue number: 153336

Sub-type: Mouse

Images:

### Contributor

**Inventor:** Chris Marshall

Institute: The Institute of Cancer Research

Images:

## **Tool details**

#### \*FOR RESEARCH USE ONLY

Name: ROCK2 Floxed Mouse

Alternate name: ROCK2; Rho-associated protein kinase 2; Rho-associated, coiled-coil-containing

ols.org

protein kinase 2; ROCK-II

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. ROCK1 and ROCK2 are downstream effectors of the Rho subfamily of small GTPases, activated by Rho GTPases. ROCK2, an isoenzyme of ROCK1, is a serine/threonine kinase and regulates cytokinesis, smooth muscle contraction, the formation of actin stress fibres and activation of the c-fos serum response element. ROCK1 is involved in cancer initiation and progression presumably through mechanisms related to metastasis, cell motility and angiogenesis.

Purpose: Parental cell:

Organism:

Tissue:

Model: Transgenic

Gender: Isotype: Reactivity: Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID: Sequence: **Growth properties:** Production details: Lox P sequences were inserted to flank exons 5 and 6 of the ROCK 2 gene Formulation: Recommended controls: Bacterial resistance: Selectable markers: **Additional notes: Target details** Target: Rho Associated Coiled-Coil Containing Protein Kinase 2 Target alternate names: Cancer Tools.org **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/Spermatoza- Dry Ice

### **Related tools**

Related tools: ROCK1 Floxed Mouse

### References

**References:** Kmper et al. 2016. Elife. 5:e12994. PMID: 26765561.; Rho-associated kinase (ROCK) function is essential for cell cycle progression, senescence and tumorigenesis.

