

PI3K-C2a kinase-dead

Catalogue number: 158396

Sub-type: Mouse

Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: PI3K-C2a kinase-dead

Alternate name:

Class:

Conjugate:

Description:

Purpose:

Parental cell:

Organism:

Tissue:

Model: Knock-In

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details: The genomic DNA encoding the ATP-binding DFG motif in the gene encoding PI3K-C2 α (Pik3c2a) is mutated to encode the AFG sequence, resulting in the production of a kinase-dead PI3K-C2 α protein.

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes: Homozygote mice are lethal between embryonic day 10.5 & 11.5. Heterozygous PI3K-C2⁺? KI mice were viable and fertile, with no significant histopathological findings. However, male heterozygous mice showed early onset leptin resistance, with a defect in leptin signalling in the hypothalamus, correlating with a mild, age-dependent obesity, insulin resistance and glucose intolerance. Insulin signalling was unaffected in insulin target tissues of PI3K-C2⁺? KI mice, in contrast to previous reports in which downregulation of PI3K-C2⁺? in cell lines was shown to dampen insulin signalling. Interestingly, no metabolic phenotypes were detected in female PI3K-C2⁺? KI mice at any age.

Target details

Target: PIK3C2A

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: Berenjeno et al. 2017. Nat Commun. 8(1):1773. PMID: 29170395.

CancerTools.org