DR3 KO Mouse

Catalogue number: 151474
Sub-type: Mouse
Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: DR3 KO Mouse

Alternate name:

Class:
Conjugate:
Description: The DR3-/- mouse exhibits complete knockout of DR3, a death domain-containing tumour necrosis factor receptor, which mediates one of the key regulators of the cell division cycle. Negative selection and anti-CD3-induced apoptosis are significantly impaired in DR3-null mice. In contrast, both superantigen-induced negative selection and positive selection are normal. The pre-T-cell receptor-mediated checkpoint, which is dependent on TNFR signaling, is also unaffected in DR3-deficient mice. These data reveal a nonredundant in vivo role for this TNF receptor family member in the removal of self-reactive T cells in the thymus.
Other behavioral studies on DR3 KO mice indicated that DR3 plays a key nonredundant role in the retention of normal motor control function during aging in mice and implicate DR3 in progressive neurological disease
Purpose:
Parental cell:
Organism:
Tissue:
Model: Knock-Out
Gender:
Isotype:
Reactivity:
Selectivity:
Host:
Immunogen:
Immunogen UNIPROT ID:

Sequence:
Growth properties:
Production details: A DR3 targeting vector, replacing the entire DR3 coding region with a loxP flanked resistance cassette, was transfected into GK129 ES cells. Correctly targeted ES cells were injected into C57BL/6 blastocysts. Chimeric offspring were bred with C57BL/6 mice to yield mice heterozygous for the mutant allele.
Formulation:
Recommended controls:
Bacterial resistance:
Selectable markers:
Additional notes:

Target details

Target: DR3 (Death Domain Receptor 3)

Target alternate names:

Target background: DR3 (Ws1, Apo3, LARD, TRAMP, TNFSFR12) is a member of the death domain-containing tumor necrosis factor receptor (TNFR) superfamily, members of which mediate a variety of developmental events including the regulation of cell proliferation, differentiation, and apoptosis

Molecular weight:

Ic50:

Applications

Application: In vivo studies of DR3-induced apoptosis & function; in vivo studies of negative T cell selection and development
Application notes:

Handling

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

Dry Ice

Related tools

Related tools:

References

References: Young et al. 1991. J Virol 65:2868-74 [PMID: 1851858]