

# MDR KO Mouse

**Catalogue number:** 154094

**Sub-type:** Mouse

**Images:**

## Contributor

**Inventor:** Riccardo Dalla-Favera

**Institute:** The Trustees of Columbia University in the City of New York

**Images:**

## Tool details

**\*FOR RESEARCH USE ONLY**

**Name:** MDR KO Mouse

**Alternate name:**

**Class:**

**Conjugate:**

**Description:** Deletion of human chromosomal region 13q14 (mouse 14qC3) represents the most common genetic aberration in B-cell chronic lymphocytic leukaemia (CLL), a neoplasm of mature B lymphocytes. 13q14 deletions are commonly large and heterogeneous in size and affect multiple genes. Contained within the 13q14 region is the 0.11 megabase-long MDR, which encompasses the DLEU2 gene and miR-15a/16-1 cluster. Deletion of the MDR in this model organism recapitulates the full spectrum of CLL-associated lymphoproliferations in humans.

**Purpose:**

**Parental cell:**

**Organism:**

**Tissue:**

**Model:** Knock-Out

**Gender:**

**Isotype:**

**Reactivity:**

**Selectivity:**

**Host:**

**Immunogen:**

**Immunogen UNIPROT ID:**

**Sequence:**

**Growth properties:**

**Production details:** A targeting vector was devised in order to flank MDR with frt-sites. DNA

fragments of the 129/Sv-14qC3 were inserted into the targeting vector. Chimeras were obtained from correctly targeted ES cell colonies after injection of the targeted W9.5 ES clones (129/SvEvTac) into blastocysts derived from C57BL/6 mice, and gave rise to MDR<sup>fl/+</sup> mice. The chimeras were then crossed with 129/SvCAGGS-Flpe to generate a MDR null allele

**Formulation:**

**Recommended controls:**

**Bacterial resistance:**

**Selectable markers:**

**Additional notes:** Knockout mouse of the MDR chromosomal region in m14qC3/h13q14, which encodes the DLEU2 gene and the miR15a/16-1 microRNA cluster

## Target details

**Target:** Minimal deleted region of h13q14/m14qC3

**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:** De Keersmaecker et al. 2010. Nat Med. 16(11):1321-7. PMID: 20972433. ; The TLX1 oncogene drives aneuploidy in T cell transformation.

CancerTools.org