

## Anti-Slc22a14 antibody, rabbit polyclonal, KO Validated

73-067 50 μg

**Shipping and Storage**: Shipped at  $4^{\circ}$ C or  $-20^{\circ}$ C and store at  $-20^{\circ}$ C.

Immunogen: Synthetic peptide corresponding to mouse Slc22a14 protein aa 615-629,

PKMDLPVQSLKAQPP, conjugated with KLH.

Validation: Knock-out mice

Form: 1 mg/ml in PBS- with 50% glycerol and 0.09% sodium azide.

**Purity**: Affinity purified with immunogen peptide. **Reactivity**: Mouse. Does not react with human

## Applications:

1. Western blotting (1-2 μg/ml)

2. Immunofluorescence staining (10 μg/ml)

3. Immunohistochemistry-Paraffin (10 µg/ml)

Key words: Sperm, Male fertility, Germline development, Reproductive biology

**Background:** Solute carrier 22a14 (Slc22a14) is a spermatogenesis-associated transmembrane protein and crucial for sperm motility and male fertility. It plays a pivotal role in normal flagellar structure, motility and fertility in mouse spermatozoa.

Molecular mass: 71,009 with 629 amino acids.

Database Links: UniProtKB Q497L9 (mouse), Entrez Gene 382113 (mouse)

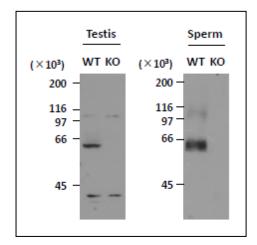


Fig.1. Identification of Slc22a14 protein in lysates of mouse testis and sperm by western blotting with this antibody.

The primary antibody was used at 1 ug/ml.

WT: Wild-type mouse

KO: Knock-out mouse



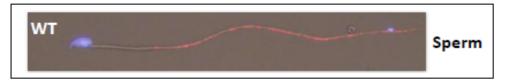


Fig.2 Immunofluoscence staining of Slc22a14 protein in mouse spermatozoa from cauda epididymis.

Anti-Slc22a14 antibody was used at 10 ug/ml (red). Nucleus was stained with DAPI (blue). Slc22a14 is predominantly localised to the principal piece

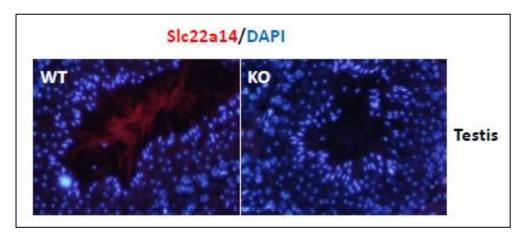


Fig.3 Immunohistological staining of Slc22a14 protein in mouse epideymis.

The anti-Slc22a14 antibody was used at 10 ug/ml (red). Nuclei were stained with DAPI (blue). Samples are paraffin embedded section.

WT: Wild-type mouse

KO: Knock-out mouse.

Reference: This antibody was described and used in the following publication..

Maruyama S. et al (2016). A critical role of solute carrier 22a14 in sperm motility and male fertility in mice. <u>Sci Rep.</u> 6:36468. doi: 10.1038/srep36468. PMCID: <u>PMC5095606</u> WB, IF, IHC-P (mouse)