

STEAP3 Antibody

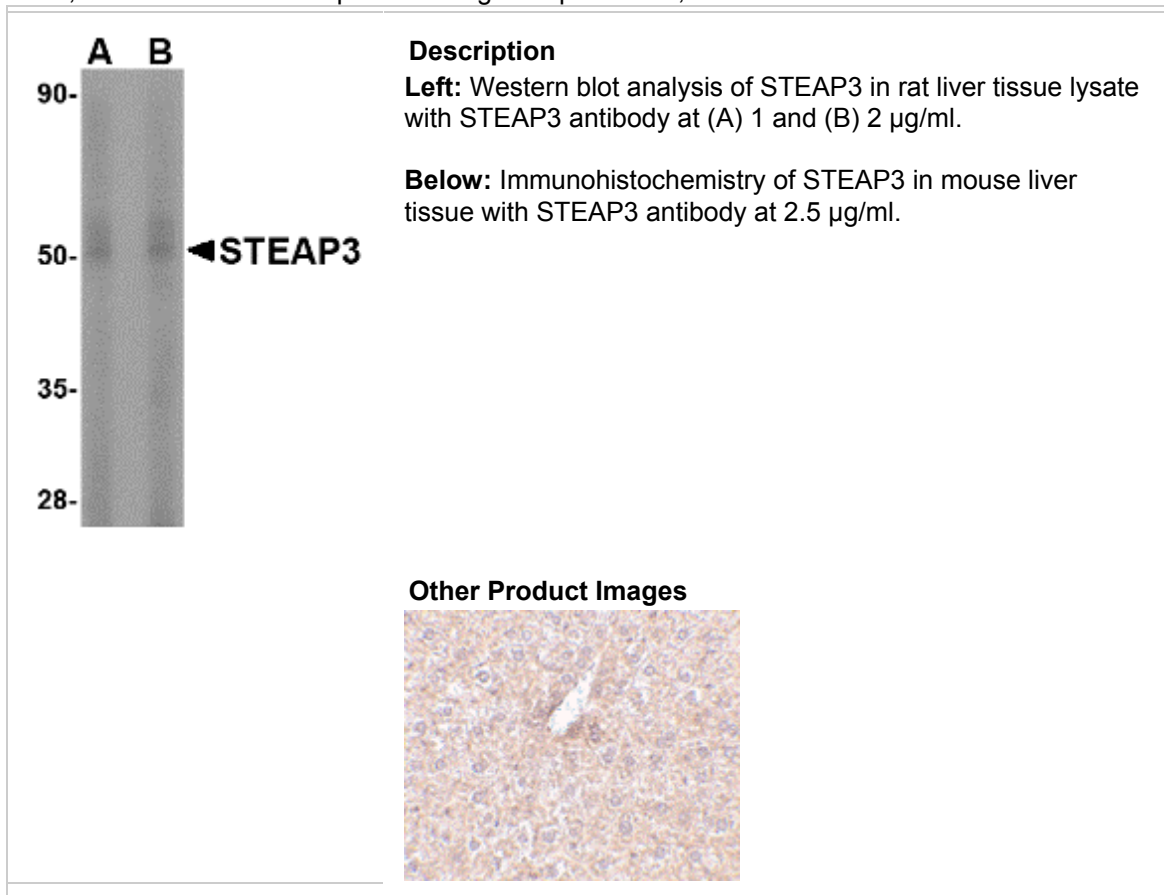
HOM-4311

Background

The six-transmembrane epithelial antigen of prostate 3 (STEAP3) is a member of a family of metalloreductases identified as cell-surface antigens in prostate tissue. Similar to two other members of the STEAP family (STEAP 2 and STEAP4), STEAP3 promotes both iron and copper reduction. STEAP3 is highly expressed in hematopoietic tissues and colocalizes with the transferrin endosome. Overexpression of STEAP3 stimulates iron reduction; mice lacking STEAP3 are deficient in erythroid ferrireductase activity, suggesting that STEAP3 is an endosomal ferrireductase required for transferrin-dependent iron uptake in erythroid cells. This STEAP3 antibody does not cross-react with other STEAP proteins.

Additional Names

STEAP3, Six transmembrane epithelial antigen of prostate 3, dudulin-2



Source

STEAP3 antibody was raised against a 15 amino acid peptide from near the amino terminus of human STEAP3.

Purification

Affinity chromatography purified via peptide column

Clonality / Clone

This is a polyclonal antibody.

Host

STEAP3 antibody was raised in rabbit.

Please use anti-rabbit secondary antibodies.

Application

STEAP3 antibody can be used for detection of STEAP3 by Western blot at 1 – 2 µg/ml.

Tested Application

E, WB, IHC

Buffer

Antibody is supplied in PBS containing 0.02% sodium azide.

Blocking Peptide

STEAP3 Peptide (contact Zyagen for availability)

Storage

STEAP3 antibody can be stored at 4°C, stable for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Positive Control

Rat Liver Tissue Lysate (contact Zyagen for availability)

Species Reactivity

H, M, R

Protein GI Number

127801437

Protein Accession Number

AAH95421

Short Description

Six transmembrane epithelial antigen of prostate 3

References

1. Ohgami RS, Campagna DR, Greer EL, et al. Identification of a ferrireductase required for efficient transferrin-dependent iron uptake in erythroid cells. *Nat. Genet.* 2005; 37:1264-9.
2. Ohgami RS, Campagna DR, McDonald A, et al. The Steap proteins are metalloreductases. *Blood* 2006; 108:1388-94.

3. Graham RM, Chua ACG, Herbison CE, et al. Liver iron transport. *World J. Gastroenterol.* 2007; 13:4725-36.