

STEAP4 Antibody
Catalog # ASC10575**Specification****STEAP4 Antibody - Product Information**

Application	WB
Primary Accession	Q687X5
Other Accession	EAW76907 , 119597313
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	STEAP4 antibody can be used for detection of STEAP4 by Western blot at 0.5 - 1 µg/mL.

STEAP4 Antibody - Additional InformationGene ID **79689****Target/Specificity**

STEAP4; At least two isoforms are known to exist for this protein. This STEAP4 antibody does not cross-react with other STEAP proteins.

Reconstitution & Storage

STEAP4 antibody can be stored at 4°C for three months and -20°C, stable for up to 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.

Precautions

STEAP4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

STEAP4 Antibody - Protein Information

Name STEAP4

Synonyms STAMP2 {ECO:0000303|PubMed:15897894}, TN

Function

Integral membrane protein that functions as a NADPH-dependent ferric-chelate reductase, using NADPH from one side of the membrane to reduce a Fe(3+) chelate that is bound on the other side of the membrane. Mediates sequential transmembrane electron transfer from NADPH to FAD and onto heme, and finally to the Fe(3+) chelate (PubMed:30337524). Can also reduce Cu(2+) to Cu(1+) (By similarity). Plays a role in systemic metabolic homeostasis, integrating inflammatory and metabolic responses (By similarity). Associated with obesity and insulin-resistance (PubMed:18381574, PubMed:18430367). Involved in inflammatory arthritis, through the regulation of

inflammatory cytokines (PubMed:19660107). Inhibits anchorage- independent cell proliferation (PubMed:19787193).

Cellular Location

Cell membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Early endosome membrane; Multi-pass membrane protein

Tissue Location

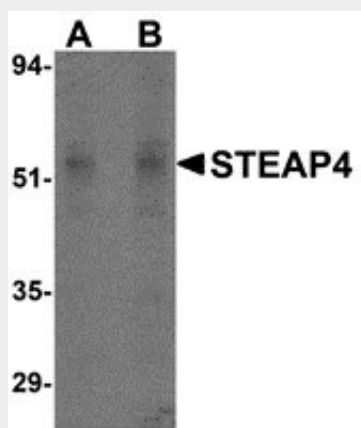
Ubiquitous. Highly expressed in adipose tissue. Expressed in placenta, lung, heart and prostate. Detected at lower levels in liver, skeletal muscle, pancreas, testis and small intestine Highly expressed in joints of patients with rheumatoid arthritis and localized with CD68 cells, a marker for macrophages

STEAP4 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

STEAP4 Antibody - Images



Western blot analysis of STEAP4 in rat liver tissue lysate with STEAP4 antibody at (A) 0.5 and (B) 1 μ g/mL.

STEAP4 Antibody - Background

STEAP4 Antibody: The six-transmembrane epithelial antigen of prostate 4 (STEAP4) is a member of a family of metalloendoreductases identified as cell-surface antigens in prostate tissue. Similar to two other members of the STEAP family (STEAP 2 and STEAP3), STEAP4 promotes both iron and copper reduction. STEAP4 is highly expressed in placenta, lung, heart and prostate tissues, and overexpressed in prostate cancer cells compared to normal prostate cells. Overexpression of STEAP4 in prostate cells significantly increases cell growth and colony formation, suggesting STEAP4 may have a role in cell proliferation and prostate cancer progression.

STEAP4 Antibody - References

Korkmaz CG, Korkmaz KS, Kurys P, et al. Molecular cloning and characterization of STAMP2, an androgen-regulated six transmembrane protein that is overexpressed in prostate cancer. *Oncogene* 2005; 24:4934-45.

Ohgami RS, Campagna DR, McDonald A, et al. The Steap proteins are metalloreductases. *Blood* 2006; 108:1388-94.