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STEAP2 Antibody
Catalog # ASC10573

Specification

STEAP2 Antibody - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	Q8NFT2
Other Accession	Q8NFT2, 83286886
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 54 kDa** **Observed: 55 kDa KDa**
Application Notes	**STEAP2 antibody can be used for detection of STEAP2 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.**

STEAP2 Antibody - Additional Information

Gene ID	**261729**

Target/Specificity
STEAP2; This STEAP2 antibody does not cross-react with other STEAP proteins.

Reconstitution & Storage
STEAP2 antibody can be stored at 4℃ for three months and -20℃, 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
STEAP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

STEAP2 Antibody - Protein Information

Name STEAP2

Synonyms PCANAP1, STAMP1

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 (By similarity). Mediates sequential transmembrane electron transfer from NADPH to FAD and onto heme, and finally to the Fe(3+) chelate (By similarity). Can also reduce Cu(2+) to Cu(1+) (By similarity).

Cellular Location
Endosome membrane {ECO:0000250|UniProtKB:Q8BWB6}; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein

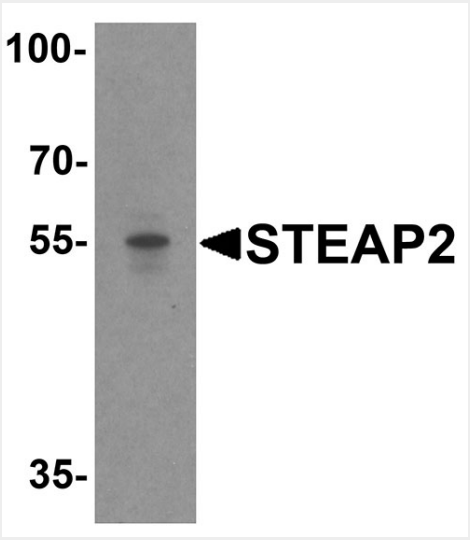
Tissue Location
Expressed at high levels in prostate and at significantly lower levels in heart, brain, kidney, pancreas, and ovary.

STEAP2 Antibody - Protocols

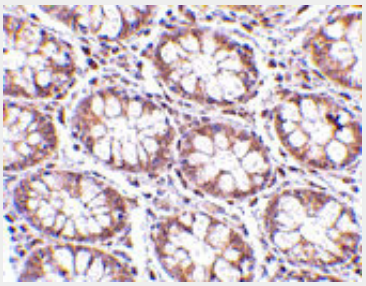
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

STEAP2 Antibody - Images



Western blot analysis of STEAP2 in human prostate tissue lysate with STEAP2 antibody at 1 µg/mL.



Immunohistochemistry of STEAP2 in human colon tissue with STEAP2 antibody at 2.5 µg/mL.

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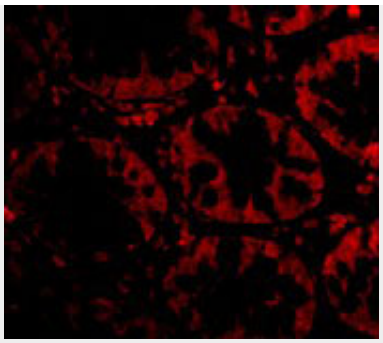

Immunofluorescence of STEAP2 in Human Colon cells with STEAP2 antibody at 20 µg/mL.

STEAP2 Antibody - Background

STEAP2 Antibody: The six-transmembrane epithelial antigen of prostate 2 (STEAP2) 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 3 and STEAP4), STEAP2 promotes both iron and copper reduction. STEAP2 expression in transfected cells also correlated with iron or copper uptake, suggesting that the STEAP family of proteins may function to stimulate iron and copper uptake. STEAP2 is widely expressed in many tissues in the plasma membrane, but is most highly expressed in prostate. At least three isoforms of STEAP2 are known to exist.

STEAP2 Antibody - References

Porkka KP, Helenius MA and Visakorpi T. Cloning and characterization of a novel six-transmembrane protein STEAP2, expressed in normal and malignant prostate. Lab Invest.2002; 82:1573-82.
Ohgami RS, Campagna DR, McDonald A, et al. The Steap proteins are metalloreductases. Blood2006; 108:1388-94.
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.