10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

STEA2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5583c

Specification

STEA2 Antibody (Center) - Product Information

Application	**WB, FC, IHC-P,E**
Primary Accession	Q8NFT2
Other Accession	NP_001035756.1
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**229-258**

STEA2 Antibody (Center) - Additional Information

Gene ID 261729

Other Names
Metalloreductase STEAP2, 1161-, Prostate cancer-associated protein 1, Protein up-regulated in metastatic prostate cancer, PUMPCn, Six-transmembrane epithelial antigen of prostate 2, SixTransMembrane protein of prostate 1, STEAP2, PCANAP1, STAMP1

Target/Specificity
This STEAP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 229-258 amino acids of human STEAP2.

Dilution
WB~~1:500-1:1000
FC~~1:10~50
IHC-P~~1:50~100
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
STEA2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

STEA2 Antibody (Center) - Protein Information

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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

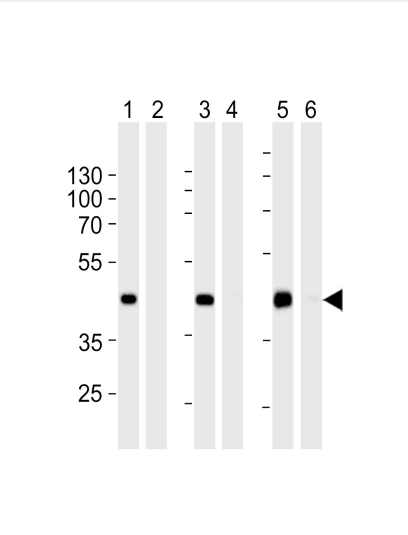
Tissue Location
Expressed at high levels in prostate and at significantly lower levels in heart, brain, kidney, pancreas, and ovary.

STEA2 Antibody (Center) - 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

STEA2 Antibody (Center) - Images



Western blot analysis of extracts from 293 (lanes 1 and 2),HepG2 (lanes 3 and 4)cell line and mouse spleen (lanes 5 and 6)tissue lysate: 1, 3, 5. using STEAP2 Antibody (Center)(AP5583c), (1:500). 2, 4, 6. using STEAP2 Antibody (Center), preincubated with the control peptide antigen.

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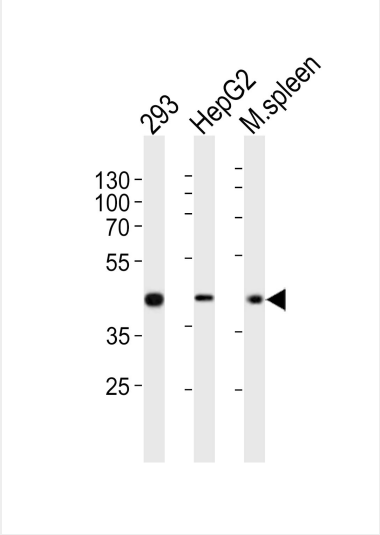
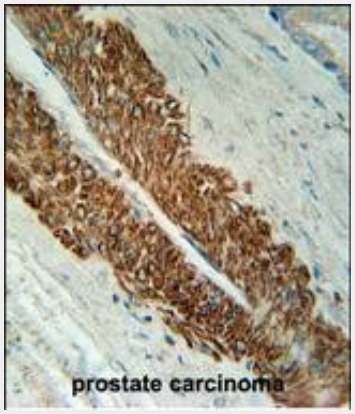
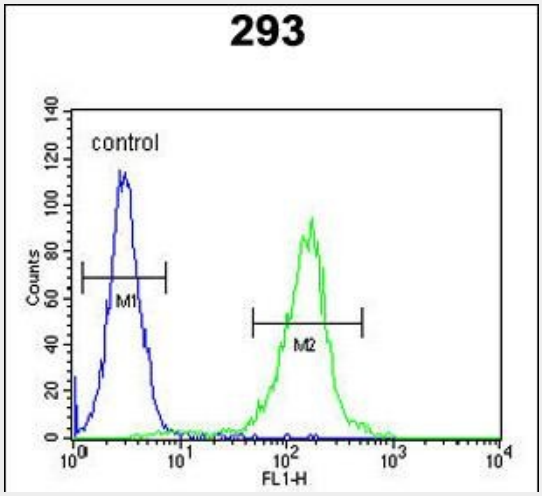


Western blot analysis of lysates from 293, HepG2 cell line, mouse spleen tissue lysate (from left to right), using STEAP2 Antibody (Center)(Cat. #AP5583c). AP5583c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.



STEAP2 Antibody (Center) (Cat. #AP5583c) immunohistochemistry analysis in formalin fixed and paraffin embedded human prostate carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the STEAP2 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



STEAP2 Antibody (Center) (Cat. #AP5583c) flow cytometric analysis of 293 cells (right histogram)

compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

STEA2 Antibody (Center) - Background

This gene is a member of the STEAP family and encodes a multi-pass membrane protein that localizes to the Golgi complex, the plasma membrane, and the vesicular tubular structures in the cytosol. A highly similar protein in mouse has both ferrireductase and cupric reductase activity, and stimulates the cellular uptake of both iron and copper in vitro. Increased transcriptional expression of the human gene is associated with prostate cancer progression. Alternate transcriptional splice variants, encoding different isoforms, have been characterized.

STEA2 Antibody (Center) - References

Vaghjiani, R.J., et al. Tissue Eng Part A 15(8):2073-2083(2009)
Denoeud, F., et al. Genome Res. 17(6):746-759(2007)
Ohgami, R.S., et al. Blood 108(4):1388-1394(2006)