

**STEAP2 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP5583c**

**Specification**

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**STEAP2 Antibody (Center) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">Q8NFT2</a>
Other Accession	<a href="#">NP_001035756.1</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	229-258

**STEAP2 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  
IHC-P~~1:50~100  
FC~~1:10~50

**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**

STEAP2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**STEAP2 Antibody (Center) - 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

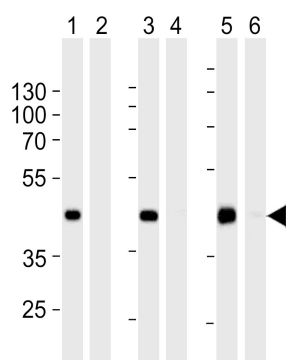
**Tissue Location**

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

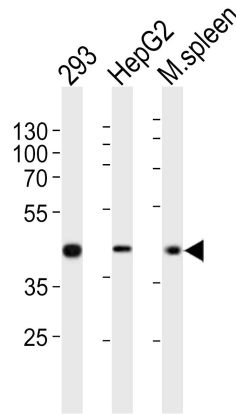
**STEA2 Antibody (Center) - Protocols**

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

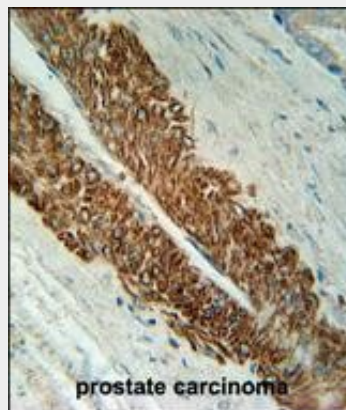
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**STEA2 Antibody (Center) - Images**

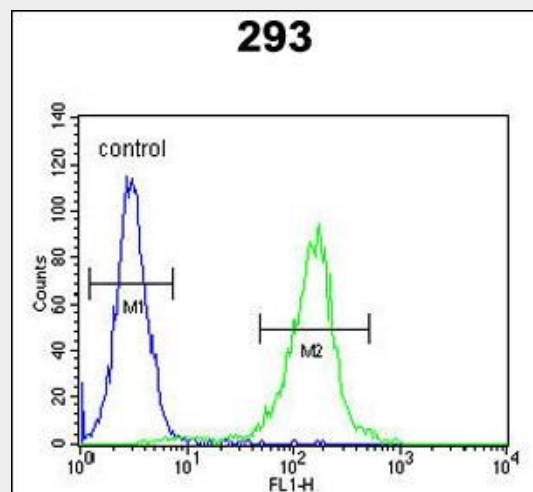
Western blot analysis of extracts from 293 (lanes 1 and 2), HepG2 (lanes 3 and 4) cell line and mouse spleen (lanes 5 and 6) tissue lysate: 1, 3, 5. using STEAP2 Antibody (Center) (AP5583c), (1:500). 2, 4, 6. using STEAP2 Antibody (Center), preincubated with the control peptide antigen.



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**

Vaghjani, 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)