

# STEAP2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP5583c

## Product Information

---

<b>Application</b>	WB, IHC-P, FC, E
<b>Primary Accession</b>	<a href="#">Q8NFT2</a>
<b>Other Accession</b>	<a href="#">NP_001035756.1</a>
<b>Reactivity</b>	Human, Rat, Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB26961
<b>Calculated MW</b>	56056
<b>Antigen Region</b>	229-258

## Additional Information

---

<b>Gene ID</b>	261729
<b>Other Names</b>	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
<b>Target/Specificity</b>	This STEAP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 229-258 amino acids of human STEAP2.
<b>Dilution</b>	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
<b>Format</b>	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
<b>Storage</b>	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.
<b>Precautions</b>	STEAP2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

---

<b>Name</b>	STEAP2
<b>Synonyms</b>	PCANAP1, STAMP1

<b>Function</b>	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).
<b>Cellular Location</b>	Endosome membrane {ECO:0000250 UniProtKB:Q8BWB6}; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein
<b>Tissue Location</b>	Expressed at high levels in prostate and at significantly lower levels in heart, brain, kidney, pancreas, and ovary.

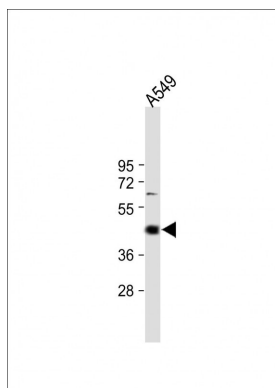
## Background

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 ferriredutase 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.

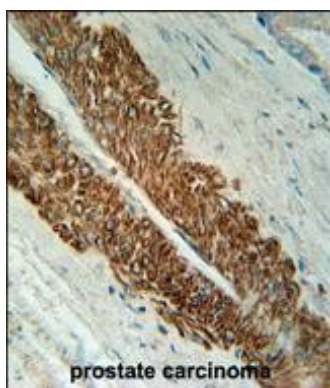
## References

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)

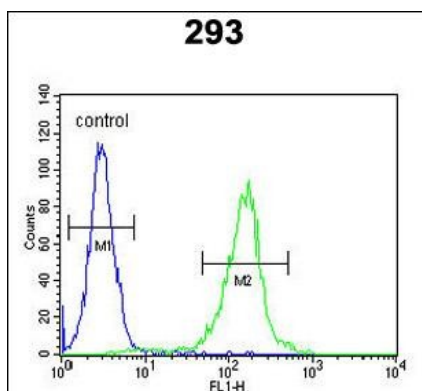
## Images



All lanes : Anti-STEAP2 Antibody (Center) at 1:1000 dilution  
 Lane 1: A549 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 48kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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.



STEA2 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.