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STEA2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5583c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q8NFT2
Other Accession	NP_001035756.1
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB26961
Calculated MW	56056
Antigen Region	229-258

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

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.

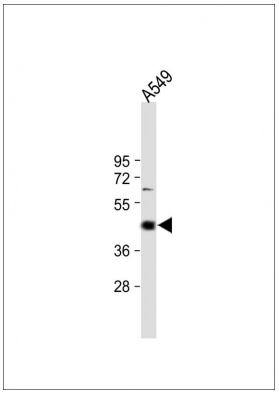
Background

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.

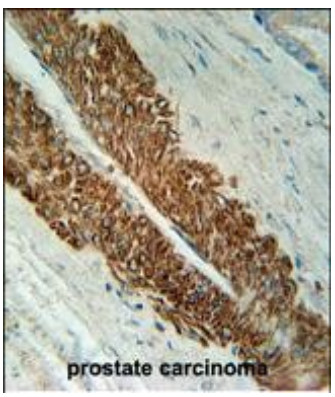
References

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)

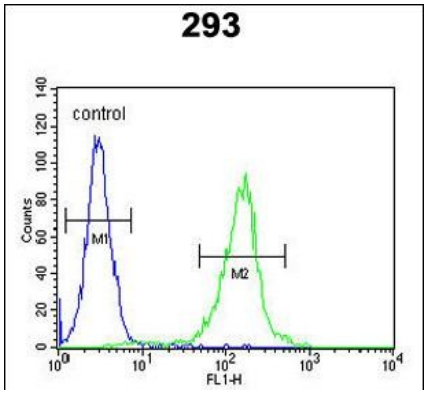
Images



All lanes : Anti-STEA2 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.



STEA2 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 STEA2 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'.