

### STEAP3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16241b

## **Specification**

#### STEAP3 Antibody (C-term) - Product Information

Application WB,E
Primary Accession Q658P3

Other Accession <u>NP\_001008410.1</u>, <u>NP\_878919.2</u>

Reactivity
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Human
Rabbit
Polyclonal
Rabbit IgG
441-470

## STEAP3 Antibody (C-term) - Additional Information

#### **Gene ID 55240**

#### **Other Names**

Metalloreductase STEAP3, 1161-, Dudulin-2, Six-transmembrane epithelial antigen of prostate 3, Tumor suppressor-activated pathway protein 6, hTSAP6, pHyde, hpHyde, STEAP3, TSAP6

## Target/Specificity

This STEAP3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 441-470 amino acids from the C-terminal region of human STEAP3.

## **Dilution**

WB~~1:1000

#### **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**

STEAP3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## STEAP3 Antibody (C-term) - Protein Information

Name STEAP3

**Synonyms** TSAP6



**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 (PubMed:26205815). 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). Mediates efficient transferrin-dependent iron uptake in erythroid cells (By similarity). May play a role downstream of p53/TP53 to interface apoptosis and cell cycle progression (By similarity). Indirectly involved in exosome secretion by facilitating the secretion of proteins such as TCTP (PubMed:15319436, PubMed:16651434).

#### **Cellular Location**

Endosome membrane {ECO:0000250|UniProtKB:Q8CI59}; Multi-pass membrane protein. Note=Localizes to vesicular- like structures at the plasma membrane and around the nucleus

#### **Tissue Location**

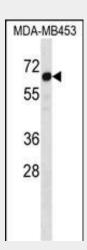
Expressed in adult bone marrow, placenta, liver, skeletal muscle and pancreas. Down-regulated in hepatocellular carcinoma.

# STEAP3 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## STEAP3 Antibody (C-term) - Images



STEAP3 Antibody (C-term) (Cat. #AP16241b) western blot analysis in MDA-MB453 cell line lysates (35ug/lane). This demonstrates the STEAP3 antibody detected the STEAP3 protein (arrow).

## STEAP3 Antibody (C-term) - Background

Endosomal ferrireductase required for efficient transferrin-dependent iron uptake in erythroid cells. Participates in erythroid iron homeostasis by reducing Fe(3+) to Fe(2+). Can also reduce of Cu(2+)





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to Cu(1+), suggesting that it participates in copper homeostasis. Uses NAD(+) as acceptor (By similarity). May play a role downstream of p53/TP53 to interface apoptosis and cell cycle progression. Indirectly involved in exosome secretion by facilitating the secretion of proteins such as TCTP.

# STEAP3 Antibody (C-term) - References

Ucisik-Akkaya, E., et al. Mol. Hum. Reprod. 16(10):770-777(2010) Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010): Caillot, F., et al. Histopathology 54(3):319-327(2009) Sendamarai, A.K., et al. Proc. Natl. Acad. Sci. U.S.A. 105(21):7410-7415(2008) Olsen, J.V., et al. Cell 127(3):635-648(2006)