

# STEAP4 Antibody (Internal)

Rabbit Polyclonal Antibody Catalog # ALS11716

# **Specification**

### STEAP4 Antibody (Internal) - Product Information

Application
Primary Accession
Reactivity
Host
Clonality

Clonality Calculated MW Dilution WB, IHC-P Q687X5

Human, Mouse, Rat

Rabbit Polyclonal 52kDa KDa WB~~1:1000 IHC-P~~N/A

# STEAP4 Antibody (Internal) - Additional Information

### **Gene ID** 79689

#### **Other Names**

Metalloreductase STEAP4, 1.16.1.-, Six-transmembrane epithelial antigen of prostate 4, SixTransMembrane protein of prostate 2, Tumor necrosis factor, alpha-induced protein 9, STEAP4, STAMP2, TNFAIP9

### Target/Specificity

a 14 amino acid peptide from near the center of human STEAP4

### **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

### **Precautions**

STEAP4 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

# STEAP4 Antibody (Internal) - Protein Information

# Name STEAP4

Synonyms STAMP2 {ECO:0000303|PubMed:15897894}, TN

#### **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. Mediates sequential transmembrane electron transfer from NADPH to FAD and onto heme, and finally to the Fe(3+) chelate (PubMed:<a

href="http://www.uniprot.org/citations/30337524" target="\_blank">30337524</a>). Can also reduce Cu(2+) to Cu(1+) (By similarity). Plays a role in systemic metabolic homeostasis, integrating inflammatory and metabolic responses (By similarity). Associated with obesity and



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insulin-resistance (PubMed:<a href="http://www.uniprot.org/citations/18381574" target=" blank">18381574</a>, PubMed:<a href="http://www.uniprot.org/citations/18430367" target="blank">18430367</a>). Involved in inflammatory arthritis, through the regulation of inflammatory cytokines (PubMed: <a href="http://www.uniprot.org/citations/19660107" target=" blank">19660107</a>). Inhibits anchorage- independent cell proliferation (PubMed:<a href="http://www.uniprot.org/citations/19787193" target=" blank">19787193</a>).

### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Early endosome membrane; Multi-pass membrane protein

### **Tissue Location**

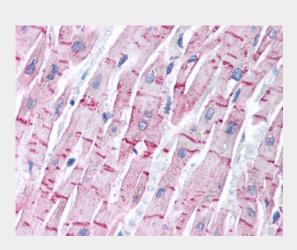
Ubiquitous. Highly expressed in adipose tissue. Expressed in placenta, lung, heart and prostate. Detected at lower levels in liver, skeletal muscle, pancreas, testis and small intestine Highly expressed in joints of patients with rheumatoid arthritis and localized with CD68 cells, a marker for macrophages

# STEAP4 Antibody (Internal) - 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

# STEAP4 Antibody (Internal) - Images



Anti-STEAP4 antibody IHC of human heart.

### STEAP4 Antibody (Internal) - Background

Metalloreductase that has the ability to reduce both Fe(3+) to Fe(2+) and Cu(2+) to Cu(1+). Uses NAD(+) as acceptor. Plays a role in systemic metabolic homeostasis, integrating inflammatory and metabolic responses (By similarity). Associated with obesity and insulin-resistance. Involved in inflammatory arthritis, through the regulation of inflammatory cytokines. Inhibits anchorage-independent cell proliferation.





# STEAP4 Antibody (Internal) - References

Korkmaz C.G.,et al.Oncogene 24:4934-4945(2005). Ota T.,et al.Nat. Genet. 36:40-45(2004). Bechtel S.,et al.BMC Genomics 8:399-399(2007). Ohgami R.S.,et al.Nat. Genet. 37:1264-1269(2005). Zhang C.M.,et al.Acta Pharmacol. Sin. 29:587-592(2008).