

STEAP4 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58574

Specification

STEAP4 Polyclonal Antibody - Product Information

Application IHC-P, IHC-F, IF, E

Primary Accession Q687X5

Reactivity
Host
Clonality
Calculated MW
Rat, Pig, Dog, Bovine
Rabbit
Polyclonal
52 KDa

Physical State
Liquid
Immunogen
KLH conjugated synthetic peptide derived

laG

from human STEAP4

Epitope Specificity 81-180/459

Isotype Purity

affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

SUBCELLULAR LOCATION Proclin300 and 50% Glycerol.

Cell membrane. Golgi apparatus

membrane; Multi-pass membrane protein.

SIMILARITY

Belongs to the STEAP family.

SUBUNIT

Interacts with and phosphorylates

PTK2/FAK1.

Important Note

This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

Background Descriptions

Metalloreductase that has the ability to reduce both Fe(3+) to Fe(2+) and Cu(2+) to Cu(1+). Uses NAD(+) as acceptor. Play 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 Polyclonal Antibody - Additional Information

Gene ID 79689

Other Names

Metalloreductase STEAP4, 1.16.1.9, Six-transmembrane epithelial antigen of prostate 4, SixTransMembrane protein of prostate 2, Tumor necrosis factor, alpha-induced protein 9, STEAP4, STAMP2 {ECO:0000303|PubMed:15897894}, TNFAIP9

Target/Specificity

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.

Dilution

IHC-P~~N/A<br \> <span class
="dilution_IHC-F">IHC-F~~N/A<br \> <span class
="dilution_IF">IF~~1:50~200<br \> E~~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

STEAP4 Polyclonal Antibody - 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:30337524). 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 insulin-resistance (PubMed:18381574, PubMed:18430367). Involved in inflammatory arthritis, through the regulation of inflammatory cytokines (PubMed:19660107). Inhibits anchorage- independent cell proliferation (PubMed:19787193).

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 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot





- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

STEAP4 Polyclonal Antibody - Images