

pHyde Polyclonal Antibody

Catalog # AP71890

Product Information

Application	WB, IHC-P, IF
Primary Accession	Q658P3
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54601

Additional Information

Gene ID	55240
Other Names	STEAP3; TSAP6; Metalloreductase STEAP3; Dudulin-2; Six-transmembrane epithelial antigen of prostate 3; Tumor suppressor-activated pathway protein 6; hTSAP6; pHyde; hpHyde
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

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

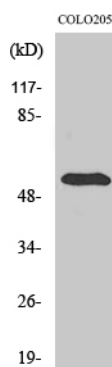
Tissue Location

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

Background

Endosomal ferriredutase required for efficient transferrin-dependent iron uptake in erythroid cells. Participates in erythroid iron homeostasis by reducing $\text{Fe}(3+)$ to $\text{Fe}(2+)$. Can also reduce of $\text{Cu}(2+)$ to $\text{Cu}(1+)$, suggesting that it participates in copper homeostasis. Uses $\text{NADP}(+)$ as acceptor. 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.

Images



Western Blot analysis of various cells using pHyde Polyclonal Antibody

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