



# pHyde Polyclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-00492                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Applications</b>                | WB;IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Gene Name</b>                   | STEAP3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human STEA3. AA range:421-470                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Specificity</b>                 | pHyde Polyclonal Antibody detects endogenous levels of pHyde protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Dilution</b>                    | 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.                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Synonyms</b>                    | dudlin 2;Dudulin 2;hpHyde;hTSAP6;Metalloreductase STEAP3;pHyde;STEAP family member 3;STEAP3;STMP3;TSAP6;Dudulin-2;Six-transmembrane epithelial antigen of prostate 3;Tumor suppressor-activated pathway protein 6                                                                                                                                                                                                                                                                                                                                  |
| <b>Observed Band</b>               | 54kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Calculated Molecular Weight</b> | 54kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Cell Pathway</b>                | Endosome membrane ; Multi-pass membrane protein . Localizes to vesicular-like structures at the plasma membrane and around the nucleus.                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Tissue Specificity</b>          | Expressed in adult bone marrow, placenta, liver, skeletal muscle and pancreas. Down-regulated in hepatocellular carcinoma.                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Function</b>                    | caution:Was initially thought to have tumor suppressor function in prostate cancer. However, it was shown that it is probably not the case (PubMed:12866033).,cofactor:FAD.,function: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+) 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.,induction:By p53/TP53.,similarity:Belongs to the STEAP family.,similarity:Contains 1 ferric oxidoreductase domain.,subcellular location:Localizes to vesicular-like structures at the plasma membrane and around the nucleus.,su

#### Background

STEAP3 metalloredutase(STEAP3) Homo sapiens This gene encodes a multipass membrane protein that functions as an iron transporter. The encoded protein can reduce both iron (Fe<sup>3+</sup>) and copper (Cu<sup>2+</sup>) cations. This protein may mediate downstream responses to p53, including promoting apoptosis. Deficiency in this gene can cause anemia. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2015],

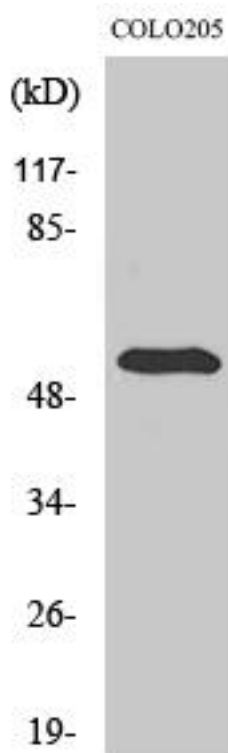
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

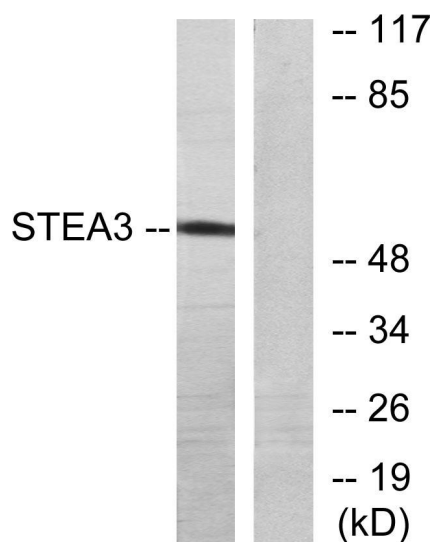
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images

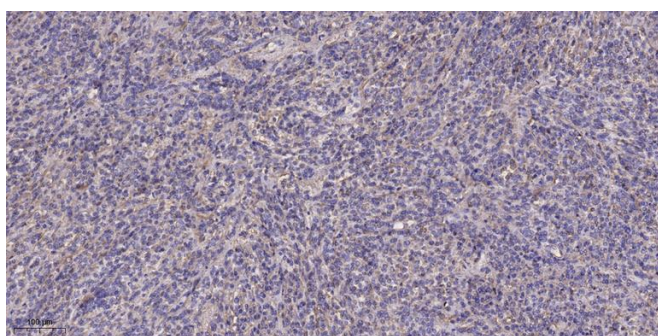


Western Blot analysis of various cells using pHyde Polyclonal Antibody

Immunofluorescence analysis of HeLa cells, using STEA3 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from COLO205 cells, using STEA3 Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human Colon cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA, pH9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200(room temperature, 45min).