
Product Name: P4HB Mouse Monoclonal Antibody**Catalog #: AMM82820**

For research use only.

Summary

| | |
|----------------------|---|
| Description | Mouse monoclonal Antibody |
| Host | Mouse |
| Application | WB,IHC,ICC,ELISA,FC |
| Reactivity | Human |
| Conjugation | Unconjugated |
| Modification | Unmodified |
| Isotype | Mouse IgG2a |
| Clonality | Monoclonal |
| Form | Liquid |
| Concentration | 1mg/ml |
| Storage | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| Shipping | Ice bags |
| Buffer | Purified antibody in PBS with 0.05% sodium azide |
| Purification | Affinity Purification |

Application

| | |
|-------------------------|---|
| Dilution Ratio | WB 1:500-1:2000,IHC 1:200-1:1000,ICC 1:200-1:1000,ELISA 1:5000-1:20000,FC 1:200-1:400 |
| Molecular Weight | 57.1kDa |

Antigen Information

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|--------------------------|--|
| Gene Name | P4HB |
| Alternative Names | DSI,GIT, PDI,PHDB, PDIA1,PO4DB, PO4HB,PROHB,CLCRP1, ERBA2L,P4Hbeta |
| Gene ID | 5034.0 |
| SwissProt ID | P07237 |
| Immunogen | Purified recombinant fragment of human P4HB (AA:309-508) expressed in mammalian. |

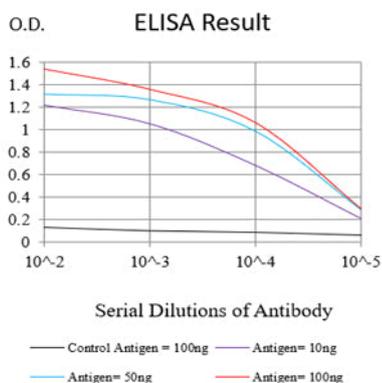
Background

This gene encodes the beta subunit of prolyl 4-hydroxylase, a highly abundant multifunctional enzyme that belongs to the protein disulfide isomerase family. When present as a tetramer consisting of two alpha and two beta subunits, this enzyme is involved in hydroxylation of prolyl residues in procollagen. This enzyme is also a disulfide isomerase containing two

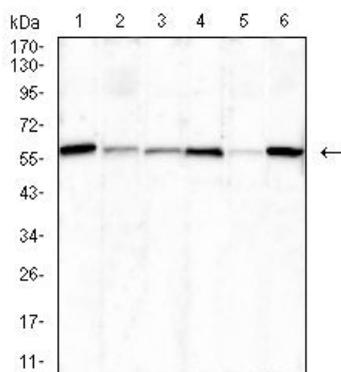
thioredoxin domains that catalyze the formation, breakage and rearrangement of disulfide bonds. Other known functions include its ability to act as a chaperone that inhibits aggregation of misfolded proteins in a concentration-dependent manner, its ability to bind thyroid hormone, its role in both the influx and efflux of S-nitrosothiol-bound nitric oxide, and its function as a subunit of the microsomal triglyceride transfer protein complex.

Research Area

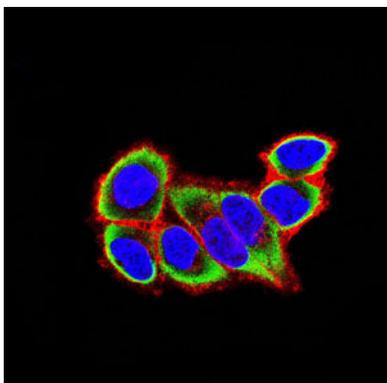
Image Data



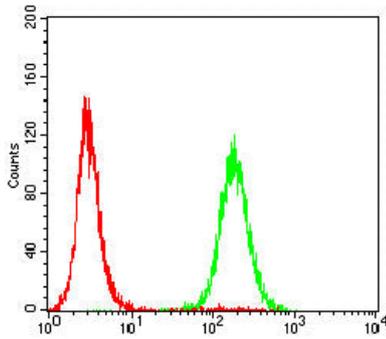
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



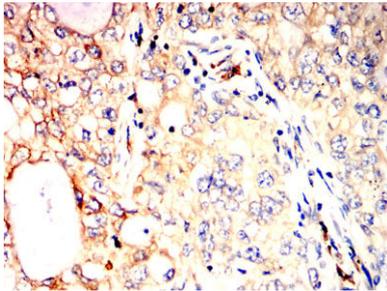
Western blot analysis using P4HB mouse mAb against HeLa (1), PANC-1 (2), MCF-7 (3),THP-1 (4),SW620 (5)and HepG2 (6)cell lysate.



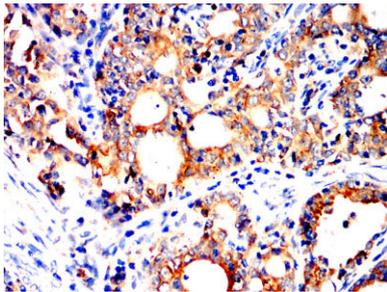
Immunofluorescence analysis of HeLa cells using P4HB mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin.



Flow cytometric analysis of HepG2 cells using P4HB mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissues using P4HB mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded human cervical carcinoma tissues using P4HB mouse mAb with DAB staining.