
Product Name: P4HB Mouse Monoclonal Antibody**Catalog #: AMM82821**

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

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.

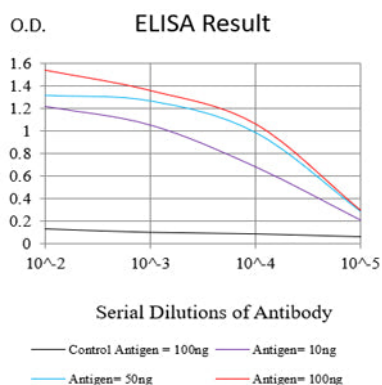
Background

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

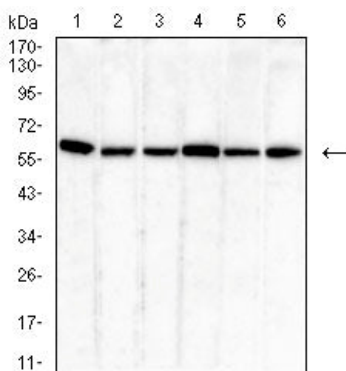
thioredoxin domains that catalyze the formation, breakage and rearrangement of disulfide bonds. Other known functions include its ability to act as a chaperone that inhibits aggregation of misfolded proteins in a concentration-dependent manner, its ability to bind thyroid hormone, its role in both the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

Research Area

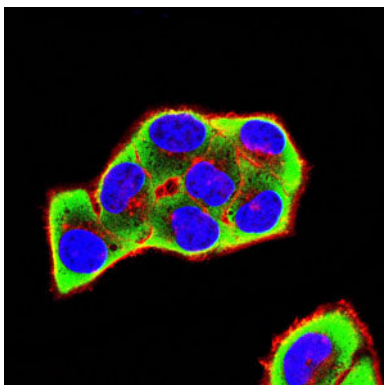
Image Data



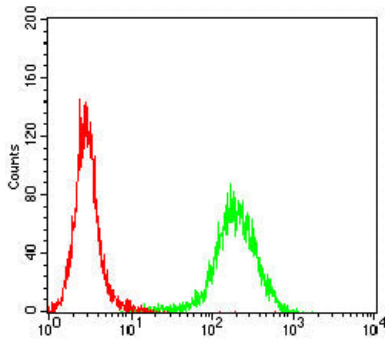
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



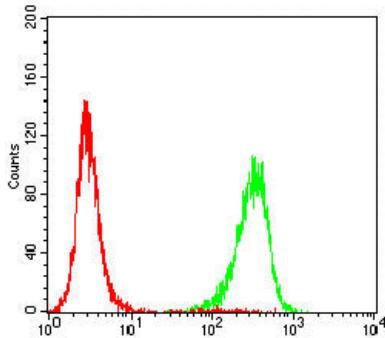
Western blot analysis using P4HB mouse mAb against HeLa (1), PANC-1 (2), MCF-7 (3),THP-1 (4),SW620 (5)and HepG2 (6)cell lysate.



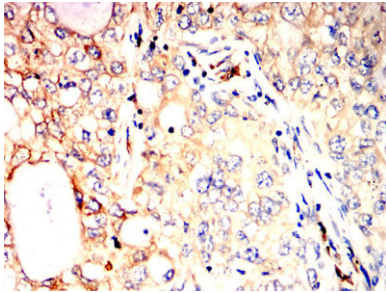
Immunofluorescence analysis of HeLa cells using P4HB mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin.



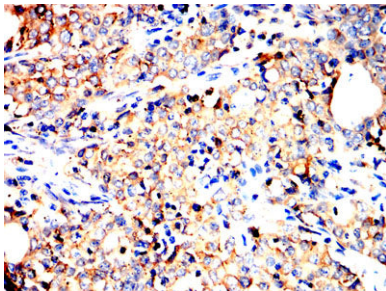
Flow cytometric analysis of HeLa cells using P4HB mouse mAb (green) and negative control (red).



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.