

P4HB Monoclonal Antibody

Description

Product type Antibody

Code BT-MCA2429

Host Mouse

 Isotype
 Mouse IgG2a

 Size
 100μL, 50μL

Immunogen Purified recombinant fragment of human P4HB (AA:309-508) expressed in mammalian.

Mol wt 57.1kDa

Species reactivity Human

Clonality Monoclonal

Recommended application WB,IHC,ICC,FCM

Concentration N/A
Full name N/A

Synonyms DSI,GIT, PDI,PHDB, PDIA1,PO4DB, PO4HB,PROHB,CLCRP1, ERBA2L,P4Hbeta

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

Background

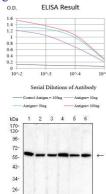
This gene encodes the beta subunit of prolyl 4-hydroxylase, a highly abundant multifunctional enzyme that belongs to the protein disulfide isomerase family. When present as a tetramer consisting of two alpha and two beta subunits, this enzyme is involved in hydroxylation of prolyl residues in preprocollagen.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

Recommended Dilution

WB: 1:500 - 1:2000 IHC-p: 1:200 - 1:1000 ICC: 1:200 - 1:1000 FCM: 1:200 - 1:400 ELISA: 1:10000

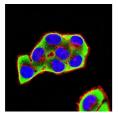
Not yet tested in other applications.

Images

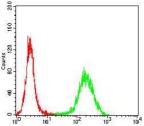


Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

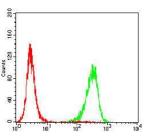
Western blot analysis using P4HB mouse mAb against Hela (1), PANC-1 (2), MCF-7 (3), THP-1 (4), SW620 (5) and HepG2 (6) cell lysate.



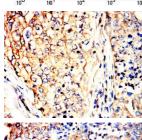
Immunofluorescence analysis of Hela cells using P4HB mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)



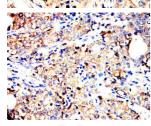
Flow cytometric analysis of Hela cells using P4HB mouse mAb (green) and negative control (red).



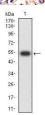
Flow cytometric analysis of HepG2 cells using P4HB mouse mAb (green) and negative control (red).



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



 $Immun ohistochemical \ analysis \ of paraffin-embedded \ cervical \ carcinoma \ tissues \ using \ P4HB \ mouse$ $mAb \ with \ DAB \ staining.$



Western blot analysis using P4HB mAb against human P4HB (AA: 309-508) recombinant protein. (Expected MW is $53.5~\mathrm{kDa}$)

Storage

Store at 4°C short term. Aliquot and store at -20°C long term.