

A0692SP

Leader in Biomolecular Solutions for Life Science



P4HB Rabbit pAb

Catalog No.: A0692SP

Basic Information

Observed MW

57 kDa

Calculated MW

57 kDa

Category

Polyclonal Antibody

Applications

WB,IHC-P,IF/ICC,IP,ELISA

Cross-Reactivity

Human,Mouse,Rat

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.

Recommended Dilutions

WB 1:2000 - 1:15000

IP 0.5 µg - 4 µg antibody for
200 µg - 400 µg extracts of
whole cells

IF/ICC 1:200 - 1:400

IHC-P 1:10000 - 1:40000

ELISA Recommended starting
concentration is 1 µg/mL.
Please optimize the
concentration based on
your specific assay
requirements. For high-
ratio antibody dilutions
(≥1:10000) , a sequential
dilution method is strongly
recommended to ensure
measurement accuracy.

Immunogen Information

Gene ID
5034

Swiss Prot
P07237

Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

Synonyms

DSI; GIT; PDI; PHDB; PDIA1; PO4DB; PO4HB; PROHB; CLCRP1; ERBA2L; P4Hbeta

Product Information

Source
Rabbit

Isotype
IgG

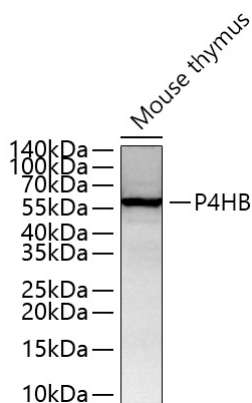
Purification
Affinity purification

Storage
Store at -20°C

Contact

 www.abclonal.com

Validation Data



Western blot analysis of lysates from Mouse thymus using P4HB Rabbit pAb (A0692SP) at 1:11000 dilution incubated overnight at 4°C.

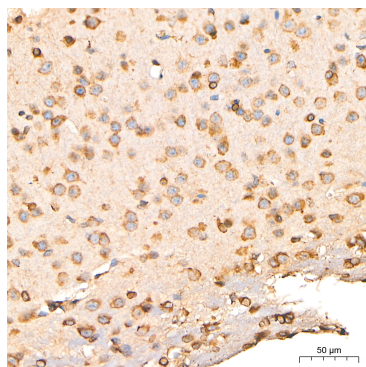
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25 µg per lane.

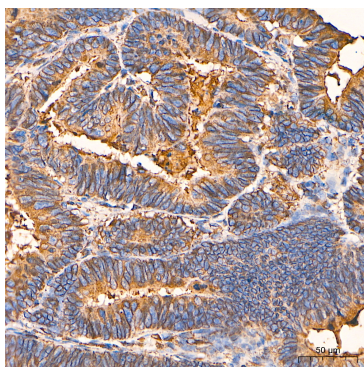
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

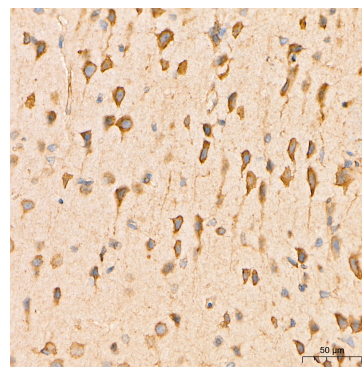
Exposure time: 30 s.



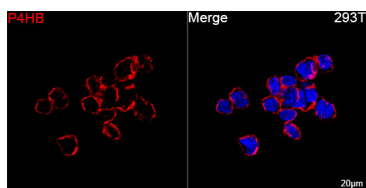
Immunohistochemistry analysis of paraffin-embedded Mouse brain tissue using P4HB Rabbit pAb (A0692SP) at a dilution of 1:13000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



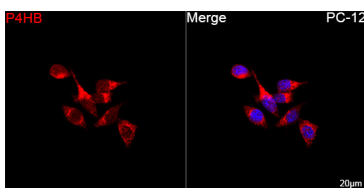
Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using P4HB Rabbit pAb (A0692SP) at a dilution of 1:13000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat brain tissue using P4HB Rabbit pAb (A0692SP) at a dilution of 1:13000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

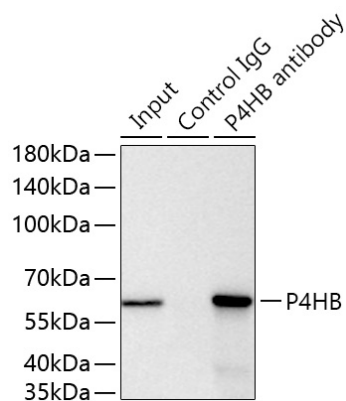


Confocal imaging of 293T cells using P4HB Rabbit pAb (A0692SP, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.



Confocal imaging of PC-12 cells using P4HB Rabbit pAb (A0692SP, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.

Validation Data



Immunoprecipitation of P4HB from 300 µg extracts of 293T cells was performed using 0.5 µg of P4HB Rabbit pAb (A0692SP). Rabbit Control IgG (AC005) was used to precipitate the Control IgG sample. IP samples were eluted with 1x Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using P4HB Rabbit pAb (A0692SP) at a dilution of 1:10000.