

Rabbit anti-Human P4HB Polyclonal Antibody | anti-P4HB antibody

Anti-P4HB Antibody, Rabbit Polyclonal

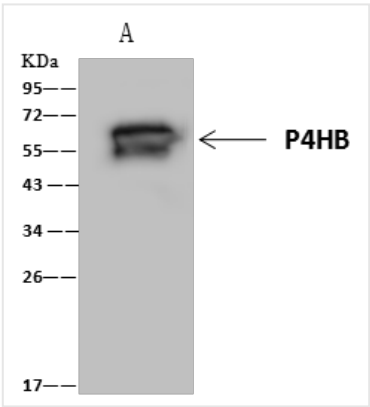
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA255214	Rabbit	Human	Immunoprecipitation, Immunofluorescence, Immunocytochemistry, Immunohistochemistry, ELISA, Western Blot

PRODUCT SYNONYMS

P4HB; Polyclonal Antibody; Anti-P4HB Antibody; Rabbit Polyclonal; P4HB Antibody; Rabbit PAb; Antigen Affinity Purified; prolyl 4-hydroxylase; beta polypeptide; Anti-DSI Antibody; Anti-ERBA2L Antibody; Anti-GIT Antibody; Anti-P4Hbeta Antibody; Anti-PDI Antibody; Anti-PDIA1 Antibody; Anti-PHDB Antibody; Anti-PO4DB Antibody; Anti-PO4HB Antibody; Anti-PROHB Antibody; anti-P4HB antibody

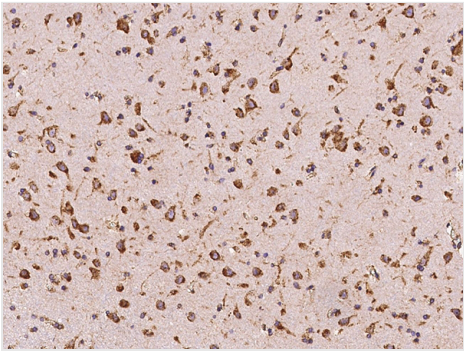
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Human P4HB
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-P4HB antibody	IP (Immunoprecipitation), IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Immunogen	Recombinant Human P4HB Protein
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with purified, recombinant Human P4HB (rh P4HB). P4HB specific IgG was purified by Human P4HB affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.



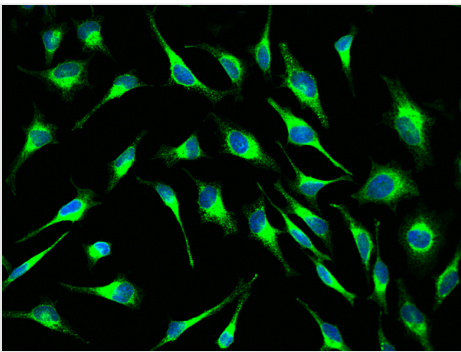
IP (Immunoprecipitation)

P4HB was immunoprecipitated using: Lane A: 0.5 mg HepG2 Whole Cell Lysate 4 uL anti-P4HB rabbit polyclonal antibody and 60 ug of Immomagnetic beads Protein A/G. Primary antibody: Anti-P4HB rabbit polyclonal antibody, at 1:100 dilution Secondary antibody: Clean-Blot IP Detection Reagent (HRP) at 1:1000 dilution Developed using the ECL technique. Performed under reducing conditions. Predicted band size: 57 kDa Observed band size :57 kDa



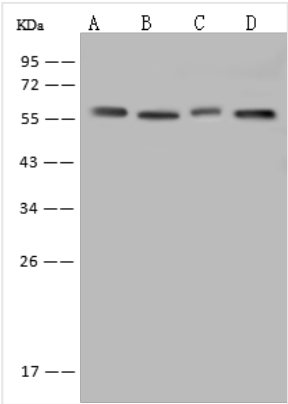
IHC (Immunohistochemistry)

Immunochemical staining of human P4HB in human brain with rabbit polyclonal antibody at 1:1000 dilution, formalin-fixed paraffin embedded sections.



IF (Immunofluorescence)

Immunofluorescence staining of P4HB in HeLa cells. Cells were fixed with 4% PFA, permeabilized with 0.1% Triton X-100 in PBS, blocked with 10% serum, and incubated with rabbit anti-Human P4HB polyclonal antibody (dilution ratio 1:1000) at 4 degree C overnight. Then cells were stained with the Alexa Fluor488-conjugated Goat Anti-rabbit IgG secondary antibody (green) and counterstained with DAPI (blue). Positive staining was localized to Cytoplasm.



WB (Western Blot)

Anti-P4HB rabbit polyclonal antibody at 1:1000 dilution Lane A: HepG2 Whole Cell Lysate Lane B: HeLa Whole Cell Lysate Lane C: 293T Whole Cell Lysate Lane D: A431 Whole Cell Lysate Lysates/proteins at 30 ug per lane. Secondary Goat Anti-Rabbit IgG (H+L)/HRP at 1/10000 dilution. Developed using the ECL technique. Performed under reducing conditions. Predicted band size: 57 kDa Observed band size: 57 kDa

ADDITIONAL INFORMATION

Related Product Information for anti-P4HB antibody

Protein disulfide-isomerase, also known as Cellular thyroid hormone-binding protein, Prolyl 4-hydroxylase subunit beta, p55 and P4HB, is a peripheral membrane protein that belongs to the protein disulfide isomerase family. P4HB is highly abundant. In some cell types, it seems to be also secreted or associated with the plasma membrane, where it undergoes constant shedding and replacement from intracellular sources. P4HB localizes near CD4-enriched regions on lymphoid cell surfaces. It is identified by mass spectrometry in melanosome fractions from stage I to stage IV. P4HB reduces and may activate fusogenic properties of HIV-1 gp12 surface protein, thereby enabling HIV-1 entry into the cell. P4HB catalyzes the formation, breakage and rearrangement of disulfide bonds. At the cell surface, it seems to act as a reductase that cleaves disulfide bonds of proteins attached to the cell. P4HB may therefore cause structural modifications of exofacial proteins. Inside the cell, it seems to form/rearrange disulfide bonds of nascent proteins. At high concentrations, P4HB functions as a chaperone that inhibits aggregation of misfolded proteins. At low concentrations, it facilitates aggregation (anti-chaperone activity). P4HB may be involved with other chaperones in the structural modification of the TG precursor in hormone biogenesis. It also acts as a structural subunit of various enzymes such as prolyl 4-hydroxylase and microsomal triacylglycerol transfer protein MTPP.

References

Kivirikko KI, et al., 1989, FASEB J., 3 (5): 1609-17. Pihlajaniemi T, et al., 1991, J Hepatol., 13, Suppl 3: S2 Fenouillet E., et al., 2001, J. Infect. Dis. 183:744-752. Gevaert K., et al., 2003, Nat. Biotechnol. 21:566-569. Barbouche R., et al., 2003, J. Biol. Chem. 278:3131-3136.

NCBI AND UNIPROT INFORMATION

NCBI GI #	20070125
NCBI GeneID	5034
NCBI Accession #	NP_000909.2
NCBI GenBank Nucleotide #	NM_000918.3
UniProt Accession #	P07237; P30037; P32079; Q15205; Q6LDE5; B2RDQ2
Molecular Weight	508
NCBI Official Full Name	protein disulfide-isomerase
NCBI Official Synonym Full Names	prolyl 4-hydroxylase, beta polypeptide
NCBI Official Symbol	P4HB
NCBI Official Synonym Symbols	DSI; GIT; PDI; PHDB; PDIA1; PO4DB; PO4HB; PROHB; ERBA2L; P4Hbeta
NCBI Protein Information	protein disulfide-isomerase; p55; procollagen hydroxylase; prolyl 4-hydroxylase subunit beta; collagen prolyl 4-hydroxylase beta; thyroid hormone-binding protein p55; glutathione-insulin transhydrogenase; cellular thyroid hormone-binding protein; protei
UniProt Protein Name	Protein disulfide-isomerase
UniProt Gene Name	P4HB
UniProt Synonym Gene Names	ERBA2L; PDI; PDIA1; PO4DB; PDI
UniProt Entry Name	PDIA1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/p4hb-antibody-immunoprecipitation-immunofluorescence-immunocytochemistry-immunohistochemistry-western-blot-elisa/255214>