ARG55126
anti-P4HB antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes P4HB
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	P4HB
Species	Human
Immunogen	Recombinant protein of Human P4HB (Swiss: P07237)
Conjugation	Un-conjugated
Alternate Names	Cellular thyroid hormone-binding protein; CLCRP1; PHDB; GIT; p55; P4Hbeta; PDIA1; ERBA2L; PROHB; PDI; DSI; Protein disulfide-isomerase; PO4DB; EC 5.3.4.1; Prolyl 4-hydroxylase subunit beta; PO4HB

Application Instructions

Application table

Application	Dilution
ICC/IF	1:20 - 1:100
IP	1:20 - 1:50
WB	1:500 - 1:2000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

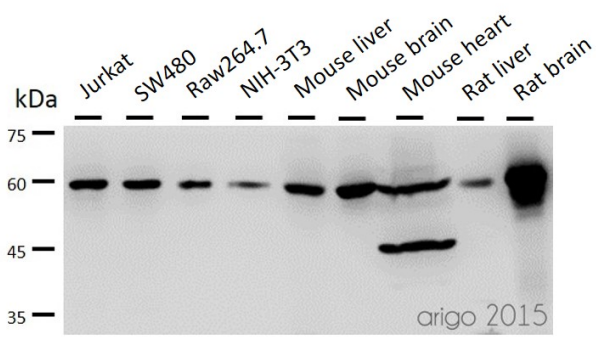
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

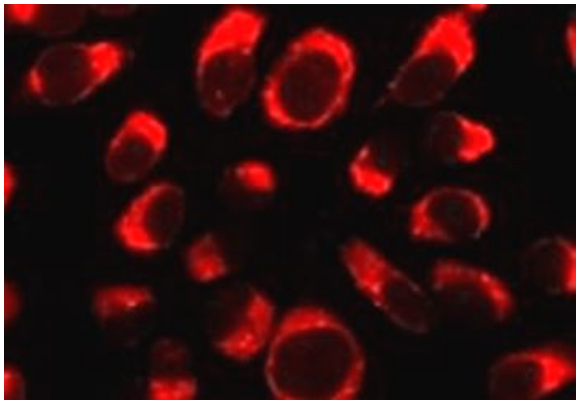
Gene Symbol	P4HB
Gene Full Name	prolyl 4-hydroxylase, beta polypeptide
Background	This gene encodes the beta subunit of prolyl 4-hydroxylase, a highly abundant multifunctional enzyme that belongs to the protein disulfide isomerase family. When present as a tetramer consisting of two alpha and two beta 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. [provided by RefSeq, Jul 2008]
Function	This multifunctional protein catalyzes the formation, breakage and rearrangement of disulfide bonds. At the cell surface, seems to act as a reductase that cleaves disulfide bonds of proteins attached to the cell. May therefore cause structural modifications of exofacial proteins. Inside the cell, seems to form/rearrange disulfide bonds of nascent proteins. At high concentrations, functions as a chaperone that inhibits aggregation of misfolded proteins. At low concentrations, facilitates aggregation (anti-chaperone activity). May be involved with other chaperones in the structural modification of the TG precursor in hormone biogenesis. Also acts a structural subunit of various enzymes such as prolyl 4-hydroxylase and microsomal triacylglycerol transfer protein MTTP. [UniProt]
Research Area	Cancer antibody; Metabolism antibody; Signaling Transduction antibody
Calculated Mw	57 kDa

Images



ARG55126 anti-P4HB antibody WB image

Western blot: 30 µg of Jurkat, SW480, Raw264.7, NIH-3T3, Mouse liver, Mouse brain, Mouse heart, Rat liver and Rat brain lysates stained with ARG55126 anti-P4HB antibody at 1:500 dilution.



ARG55126 anti-P4HB antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG55126 anti-P4HB antibody.