



Mouse Anti-Rat P4HB Monoclonal Antibody, clone 7-0I7 (CABT-Z323M)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	The antibody reacts with the beta subunit of rat P4HB specifically found in the skin of newborn rat.
Immunogen	Rat Prolyl-4-Hydrolase beta.
Isotype	IgG1, κ
Source/Host	Mouse
Species Reactivity	Rat
Clone	7-0I7
Purification	Affinity Purified
Conjugate	Unconjugated
Applications	IHC, ELISA Recommended dilution: IHC-F: 1 µg/ml (1:200) IHC-P: 10 µg/ml (1:20), Proteinase K pretreatment for antigen retrieval is recommended.
Reconstitution	Reconstitute by adding 0.5ml distilled water.
Format	Lyophilized
Size	100 µg
Buffer	Phosphate buffered saline pH, 7.2, 5mg/ml bovine serum albumin (BSA) as a stabilizer and 0.1% Kathon as a preservative.

Preservative	None
Storage	Original vial: 1 year at 4-8°C. Stock solution or aliquots thereof: 1 year at -20°C. Avoid repeated thawing and freezing.
Ship	Wet ice

BACKGROUND

Introduction	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. Receptor for LGALS9; the interaction retains P4HB at the cell surface of Th2 T helper cells, increasing disulfide reductase activity at the plasma membrane, altering the plasma membrane redox state and enhancing cell migration.
Keywords	P4HB;prolyl 4-hydroxylase, beta polypeptide;ERBA2L;PO4DB;Prolyl 4-hydroxylase subunit beta;PDI;Protein disulfide-isomerase

GENE INFORMATION

Gene Name	P4hb
Entrez Gene ID	25506
UniProt ID	P04785