

# Recombinant *Cricetulus griseus* Protein disulfide-isomerase(P4HB)

Catalog No: #AP76633

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Package Size: #AP76633-1 20ug #AP76633-2 100ug #AP76633-3 1mg

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## Description

Product Name	Recombinant <i>Cricetulus griseus</i> Protein disulfide-isomerase(P4HB)
Brief Description	Recombinant Protein
Host Species	Yeast
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:20-509aaSequence Info:Full Length
Other Names	Prolyl 4-hydroxylase subunit beta p58
Accession No.	Q8R4U2
Uniprot	Q8R4U2
GeneID	100689433;
Calculated MW	57 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	DAPEEEDNVLVLKKSNAEALAAHNYLLVEFYAPWCGHCKALAPEYAKAAAKLKAEGSEIRLAKVDATEESDL AQQYGVRYPTIKFFKNGDTASPKEYTAGREADDIVNWLKKRTGPAATLSDTAAAETLIDSSEVAVIGFFKDV ESDSAKQFLLAEEAVDDIPFGITSNSGVFSKYQLDKDGVVLFKKFDEGRNPFEGEVTKKLLDFIKHNQLPLVIE FTEQTAPKIFGGEIKTHILLFLPKSVSDYDGKLGNFKAAEGFKGKILFIFIDSDHTDNQRILEFFGLKKEECPAVR LITLEEEMTKYKPEDELTAEKITEFCHRFLGKIKPHLMSQELPEDWDKQPVKVLVGKNFEEVAFDEKKNVFV EFYAPWCGHCKQLAPIWDKLGETYKDHEINIIIAKMDSTANEVEAVKVHVSFPTLKFFPATADRTVIDYNGERTLD GFKKFLESQQDAGADDDDDVDLEEALEPDMEEDDDQKAVKDEL
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.  Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

## Background

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.

## References

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"Protein-disulfide isomerase is a component of an NBD-cholesterol monomerizing protein complex from hamster small intestine."Cai T.-Q., Guo Q., Wong B., Milot D., Zhang L., Wright S.D.Biochim. Biophys. Acta 1581:100-108(2002)Research Topic:Signal Transduction

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Note: This product is for in vitro research use only