

Recombinant Human Glutaminyl-peptide cyclotransferase(QPCT)

Catalog No: #AP70691

Package Size: #AP70691-1 20ug #AP70691-2 100ug #AP70691-3 1mg

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Description

Product Name	Recombinant Human Glutaminyl-peptide cyclotransferase(QPCT)
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:29-361aaSequence Info:Full Length
Other Names	Glutaminyl cyclase ;QC ;sQCGlutaminyl-tRNA cyclotransferaseGlutamyl cyclase ;EC
Accession No.	Q16769
Calculated MW	53.9 kDa
Tag Info	N-terminal 6xHis-SUMO-tagged
Target Sequence	VSPSASAWPEEKNYHQPAILNSSLRQIAEGTISEMWQNDLQPLLIERYPGSPGSYAARQHIMQRIQRLQAD WVLEIDTFLSQTPYGYRSFSNIISTLNPTAKRHLVLACHYDSKYFSHWNNRVFVGATDSAVPCAMMLELARAL DKKLLSLKTVSDSKPDLSQLIFFDGEEAFLHWSPQDSLYGSRHLAAKMASTPHPPGARGTSQLHGMDLLVLL DLIGAPNPTFPNFFPNSARWFERLQAIHEHLEHLLKDHSLLEGTRYFQNYSYGGVIQDDHIPFLRRGVPVLHLIP SPFPEVWHTMDDNEENLDESTIDNLNKILQVFVLEYLHL
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

Responsible for the biosynthesis of pyroglutamyl peptides. Has a bias against acidic and tryptophan residues adjacent to the N-terminal glutaminy residue and a lack of importance of chain length after the second residue. Also catalyzes N-terminal pyroglutamate formation. In vitro, catalyzes pyroglutamate formation of N-terminally truncated form of APP amyloid-beta peptides [Glu-3]-beta-amyloid. May be involved in the N-terminal pyroglutamate formation of several amyloid-related plaque-forming peptides.

References

Structures of human Golgi-resident glutaminy cyclase and its complexes with inhibitors reveal a large loop movement upon inhibitor binding.Huang K.F., Liaw S.S., Huang W.L., Chia C.Y., Lo Y.C., Chen Y.L., Wang A.H.J. Biol. Chem. 286:12439-12449(2011) Research Topic:Neuroscience

Note: This product is for in vitro research use only and is not intended for use in humans or animals.