

Recombinant Protein Technical Manual

Recombinant Mouse Latexin/LXN Protein (His Tag)(Active) **RPES5004**

Product SKU: RPES5004	Size: 10µg

Species: Mouse

Expression host: E. coli

Uniprot: NP_058033.2

Molecular Mass:	26.3 kDa
AP Molecular Mass:	32 kDa
Tag:	N-His
Bio-activity:	Measured by its ability to inhibit carboxypeptidase-A1 cleavage of the colorimetric peptide substrate Ac-Phe-Thiaphe-OH in the presence of 5,5'Dithiobis(2-nitrobenzoic acid) (DTNB) (Edwards, K. M. et al, 1999, J. Biol. Chem. 274:30468). The IC50 value is <
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	Please contact us for more information.
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile PBS, pH 8.0, 10% glycerol
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	MGC144352, MGC144353

Sequence: Glu 2-Glu 222

Background:

Latexin, also known as endogenous carboxypeptidase inhibitor, tissue carboxypeptidase inhibitor, TCI, ECI and LXN, is a cytoplasm protein which belongs to the protease inhibitor I47 (latexin) family. It is highly expressed in heart, prostate, ovary, kidney, pancreas, and colon. Latexin / LXN is the only known endogenous specific inhibitor of zinc-dependent metallocarboxypeptidases (MCPs) present in mammalians so far. Latexin is originally identified as a molecular marker for the regional specification of the neocortex in development in rats. The 222 amino acid latexin in human shows different expression distribution with high levels in heart, prostate, ovary, kidney, pancreas, and colon, but only moderate or low levels in other tissues including brain. Latexin is also expressed at high levels and is inducible in macrophages in concert with other protease inhibitors and potential protease targets, and thus is suggested to play a role in inflammation and innate immunity pathways. Despite of the non-detectable sequence similarity with plant and parasite inhibitors, Latexin is related to a human putative tumor suppressor protein, TIG1. In addition, Latexin is also implicated in Alzheimer's disease.