Human Latexin / LXN / TCI Protein (His Tag)

Catalog Number: **10211-H07E**

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General Information

Gene Name Synonym:

ECI; TCI

Protein Construction:

A DNA sequence encoding the human Latexin (NP_064554.3) (Glu 2-Glu222) was expressed, fused with a polyhistidine tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 97 % as determined by SDS-PAGE

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Met

Molecular Mass:

The recombinant human LXN consists of 230 amino acids and predicts amolecular mass of 26.8 kDa which is also estimated by SDS-PAGE.

Formulation:

Lyophilized from sterile 20mM HEPES, 0.1M KCl, pH 7.5

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

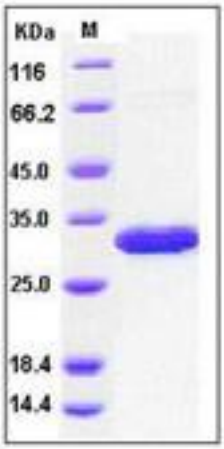
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Mouse 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.

References

1.Liu Q., *et al.*,(2000), Cloning, tissue expression pattern and genomic organization of latexin, a human homologue of rat carboxypeptidase A inhibitor. Mol. Biol. Rep. 27:241-246.
2.Gauci S., *et al.*, (2009), Lys-N and trypsin cover complementary parts of the phosphoproteome in a refined SCX-based approach.nal. Chem. 81:4493-4501.
3.Muzny D.M., *et al.*,(2006), The DNA sequence, annotation and analysis of human chromosome 3.Nature 440:1194-1198.