

Mouse LXN / Latexin Protein (His Tag)

Catalog Number: 50050-M07E



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

ECI; TCI

Protein Construction:

A DNA sequence encoding the mouse LXN (NP_058033.2) (Glu 2-Glu 222) was expressed, with a polyhistidine tag at the N-terminus.

Source: Mouse

Expression Host: E. coli

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:

Measured by its ability to inhibit carboxypeptidase-A1 cleavage of the colorimetric peptide substrate Ac-Phe-Thiaph-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

Endotoxin:

Please contact us for more information.

Stability:

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

Predicted N terminal: Met

Molecular Mass:

The recombinant mouse LXN consisting of 228 amino acids and has a calculated molecular mass of 26.3 kDa. The apparent molecular mass of the mLXN is approximately 32 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 8.0, 10% glycerol

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:

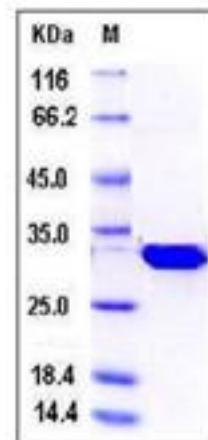
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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 metalloproteinases (MCPs) present in mammals 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.

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