

Recombinant Mouse LIX Protein(Sumo Tag)

Catalog Number: GPEM0138

Note: Centrifuge before opening to ensure complete recovery of vial contents.

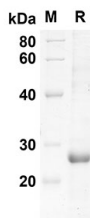
Description

Species	Mouse
Source	E.coli-derived Mouse LIX protein Val45-Ala118, with an N-terminal Sumo
Calculated MW	21 kDa
Observed MW	25 kDa
Accession	P50228
Bio-activity	Not validated for activity

Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, 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 a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Mouse LIX proteins, 2 µg/lane of Recombinant Mouse LIX proteins was resolved with an SDS-PAGE under reducing conditions, showing bands at 21 KD

Background

LIX (Liposaccharide-Induced CXC chemokine, also GARG-8 and Cxcl5) is a secreted 8-9 kDa member of the Interleukin alpha (or CXC) family of chemokines. It is widely expressed, being produced by diverse cell types such as fibroblasts, thymic epithelium, platelets, vascular endothelium, hepatocytes, lung type II alveolar cells and ileal columnar epithelium. As a chemokine, LIX demonstrates chemokinetic properties. It induces the chemotaxis of neutrophils and endothelial cells, and also promotes TNF-alpha secretion from mast cells and macrophages. Notably, circulating LIX is not derived from fibroblasts, but platelets. This suggests that neutrophil homeostasis/chemotaxis is a function of local resident cell activation and LIX secretion, not generally circulating LIX. Mouse LIX is synthesized as a 132 amino acid (aa) precursor that contains a 40 aa signal sequence, a 78 aa mature region (aa 41-118), and a cleavable 14 aa C-terminus. The mature region possesses an ELR/GluLeuArg motif between aa 50-52, and an alpha-family characteristic CXC motif between aa 53-55. Although there are no known splice variants of mouse LIX, considerable proteolytic processing occurs at both the N- and C-termini over aa 41-132. This may reduce the MW in SDS-PAGE by as much as 3 kDa. The majority of LIX appears to start between aa 47-50, and this is positively correlated with its bioactivity. Over aa 41-118, mouse LIX shares 73% aa sequence identity with a rat LIX. Although not a strict ortholog, mouse LIX shares 63% aa sequence identity with a human GCP-2.