

DESCRIPTION

Species Reactivity	Rat
Specificity	Detects rat LIX in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant mouse (rm) LIX is observed, 5% cross-reactivity with recombinant rat (rr) CXCL2 is observed, and no cross-reactivity is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 135803
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant rat LIX Ala38-Arg125, Ala38-Lys117 Accession # P97885.1
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide

*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

ELISA Capture (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
ELISA Detection (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
Neutralization	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

LIX (Liposaccharide-Induced CXC chemokine; also GARG-8) is a secreted 8-10 kDa member of the Interleukin alpha (or Cx) 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 chemotactic properties. It induces the chemotaxis of neutrophils and endothelial cells, and also promotes TNF-α 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. Rat LIX is synthesized as a 130 amino acid (aa) precursor that contains a 37 aa signal sequence plus a 93 aa mature region (aa 38-130) that likely possesses a cleavable 13 aa C-terminus (SwissProt #:P97885). The mature region possesses a receptor-binding ELR/GluLeuArg motif between aa 47-50, and an α-family characteristic Cx motif between aa 50-52. Although there are no known splice variants of rat LIX, based on mouse, considerable proteolytic processing likely occurs at both the N- and C-termini over aa 38-130. This may reduce the MW in SDS-Page by as much as 3 kDa. The majority of LIX could be expected to start between aa 43-46, and this is likely to be positively correlated with bioactivity. Over aa 38-117, rat LIX shares 73% aa sequence identity with mouse LIX. Although not a strict ortholog, rat LIX also shares 64% aa sequence identity with human GCP-2.

PRODUCT SPECIFIC NOTICES

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