

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CXCL3/GRO γ /CINC-2/DCIP-1 in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant rat CINC-2 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse CXCL3/GRO γ /CINC-2/DCIP-1 Ala28-Ser100 Accession # AAI17017
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.

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

CXCL3 is also known as MIP-2 β (macrophage inflammatory protein 2 beta), or DCIP-1 (dendritic cell inflammatory protein-1) in mouse, CINC2 (cytokine-induced neutrophil attractant 2) in rat, and GRO- γ (growth-regulated oncogene gamma) in humans (1, 2). It is an 8 kDa proinflammatory member of the CXC subfamily of heparin-binding chemokines, also called alpha chemokines (1-4). The Glu-Leu-Arg (ELR) motif near the CXCL3 N-terminus confers angiogenic properties and distinguishes it from interferon-inducible ELR⁻ CXC chemokines, which are angiostatic (4). ELR⁺ and ELR⁻ chemokines use CXCR2 and CXCR3 receptors, respectively (3, 4). Mature mouse CXCL3 shares 88% and 57% amino acid (aa) sequence identity with rat and human CXCL3, respectively. Among mouse ELR⁺ chemokines, it shares 82% aa sequence identity with CXCL2/GRO- β /MIP-2 and 34% - 58% with CXCL1/GRO- α /KC, CXCL5/ENA-78 and CXCL7/NAP-2. Due to their similar sequence and activity, CXCL2 and CXCL3 are sometimes referred to collectively as CXCL2/3, but are separate gene products (4-6). Mouse CXCL3 expression is induced in macrophages and early in maturation of DC by bacterial products such as lipopolysaccharides, and other inflammatory mediators (1, 7). It is chemotactic for CXCR2-expressing neutrophils, helping to recruit them to areas of inflammation (1, 7). ELR⁺ chemokines also elicit endothelial cell chemotaxis, stimulating angiogenesis and playing a role in tumor development (3, 4). ELR⁺ chemokines upregulated by ischemia play a role in ischemia-reperfusion injury (5, 6). A decoy receptor, DARC (Duffy antigen receptor for chemokines) competes with CXCR2 for ELR⁺ chemokine binding, thus downregulating their effect (8). Neutrophil influx may also be downregulated by MMP-12, which has been found to inactivate CXCL3 and other ELR⁺ chemokines by cleaving them at the ELR site (9). Over aa 28-100, mouse CXCL3 shares 87.8% aa identity with rat CINC2.

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