

## Rat CXCL1/GROα/KC/CINC-1 Antibody

Monoclonal Mouse IgG<sub>2A</sub> Clone # 251021 Catalog Number: MAB515

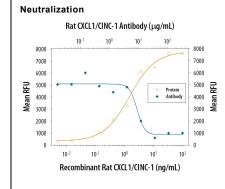
DESCRIPTION			
Species Reactivity	Rat		
Specificity	Detects rat CXCL1/GROα/KC/CINC-1 in direct ELISAs and Western blots. In Western blots, 100% cross-reactivity with recombinant human (rh) GROα, rhGROβ, rhGROγ, and recombinant mouse KC is observed. No cross-reactivity with recombinant rat (rr) CINC2a, rrCXCL3, rhCXCL5, 6, 7, 8, 9, 10, 11, 12 or 13, rmCXCL2, 6, 9, 10, 12, 13, or recombinant porcine CXCL8 is observed.		
Source	Monoclonal Mouse IgG <sub>2A</sub> Clone # 251021		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	E. coli-derived recombinant rat CXCL1/GROα/KC/CINC-1 Ala25-Lys96 Accession # P14095		
Endotoxin Level	<0.10 EU per 1 μg of the antibody by the LAL method.		
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.		

#### 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.

	Recommended Concentration	Sample
Western Blot	1 μg/mL	Recombinant Rat CXCL1/GROα/KC/CINC-1 (Catalog # 515-CN)
Neutralization	Measured by its ability to neutralize CXCL1/GRO $\alpha$ /KC/CINC-1-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CXCR2. The Neutralization Dose (ND $_{50}$ ) is typically 3-15 $\mu$ g/mL in the presence of	
	4 ng/mL Recombinant	: Rat CXCL1/GROα/KC/CINC-1.

# DATA



Chemotaxis Induced by CXCL1/CINC-1 and Neutralization by Rat CXCL1/ CINC-1 Antibody. Recombinant Rat CXCL1/CINC-1 (Catalog # 515-CN) chemoattracts the BaF3 mouse pro-B cell line transfected with human CXCR2 in a dosedependent manner (orange line). The amount of cells that migrated through to the lower chemotaxis chamber was measured by Resazurin (Catalog # AR002) Chemotaxis elicited by Recombinant Rat CXCL1/ CINC-1 (4 ng/mL) is neutralized (green line) by increasing concentrations of Mouse Anti-Rat CXCL1/CINC-1 Monoclonal Antibody (Catalog # MAB515). The ND<sub>50</sub> is typically 3-15 µg/mL.

### PREPARATION AND STORAGE

Reconstitution Reconstitute at 0.5 mg/mL in sterile PBS

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

\*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

### Stability & Storage

#### Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

#### BACKGROUND

Cytokine-induced neutrophil chemoattractant 1 (CINC-1) was originally purified from media conditioned by IL-1β stimulated rat kidney epithelioid cells (NRK-52E). On the basis of its protein and DNA sequences, CINC-1 is a member of the alpha (CXC) subfamily of chemokines, designated CXCL1. Three additional rat CXC chemokines (CINC-2α, CINC-2β, CINC-3/MIP-2), sharing approximately 63-67% amino acid sequence identity with CINC-1, have been identified. The protein sequence of rat CINC-1 is also 68%, 71%, and 69% identical to that of human GRO-α, GRO-β, and GRO-γ, respectively. Based on their sequence homology, it has been suggested that CINCs are the rat counterpart of human GROs. CINC-1 is also the counterpart of mouse KC. Rat CINC-1 cDNA encodes a 96 amino acid residue precursor protein from which the amino-terminal 24 amino acid residues are cleaved to generate the mature CINC-1. Similar to other alpha chemokines, rat CINCs are potent neutrophil attractants and activators and have been shown to play an important role in the infiltration of neutrophils into inflammatory sites in rats.

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