Mouse CXCL1/GROα/KC/CINC-1 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF-453-NA

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CXCL1/GROα/KC/CINC-1 in direct ELISAs and Western blots. In direct ELISAs, approximately 40% cross-reactivity with recombinant rat (rr) CINC-1 is observed, 10% cross-reactivity with recombinant mouse MIP-2 and recombinant human (rh) IL-8 is observed, and less than 5% cross-reactivity with rhGROα, rrCINC-2α, and rrCINC-2β is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant mouse CXCL1/GROα/KC/CINC-1 Arg20-Lys96 Accession # P12850
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.

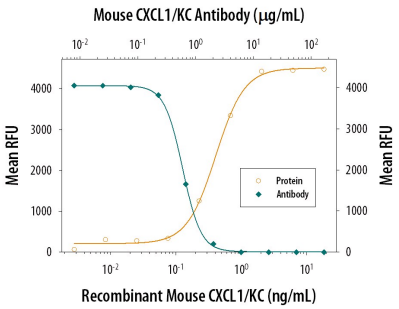
APPLICATIONS

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	0.1 µg/mL	Recombinant Mouse CXCL1/GROα/KC/CINC-1 aa 20-96 (Catalog # 453-KC)
Neutralization	Measured by its ability to neutralize CXCL1/GROα/KC/CINC-1-induced chemotaxis in the BaF3 mouse pro-B cell line transfected with human CXCR2. The Neutralization Dose (ND_{50}) is typically 0.3-1.5 µg/mL in the presence of 30 ng/mL Recombinant Mouse CXCL1/GROα/KC/CINC-1 aa 20-96.	

DATA

Neutralization



Chemotaxis Induced by CXCL1/KC and Neutralization by Mouse CXCL1/KC Antibody. Recombinant Mouse CXCL1/KC (Catalog # 453-KC) chemoattracts the BaF3 mouse pro-B cell line transfected with human CXCR2 in a dose-dependent 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 Mouse CXCL1/KC (30 ng/mL) is neutralized (green line) by increasing concentrations of Goat Anti-Mouse CXCL1/KC Antigen Affinity-purified Polyclonal Antibody (Catalog # AF-453-NA). The ND_{50} is typically 0.3-1.5 µg/mL.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
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

KC, a member of the alpha (CXC) chemokine subfamily, was initially identified as an immediate early gene induced in mouse fibroblasts by platelet-derived growth factor. KC cDNA encodes a 96 amino acid (aa) residue precursor protein with a predicted secretory signal peptide that is removed to yield the mature protein. The protein sequence of mouse KC shows approximately 63% identity to that of mouse MIP-2. KC is also approximately 60% identical to the human GROs. It has been suggested that mouse KC and MIP-2 are the orthologs of the human GROs and rat CINCs. In addition to mouse fibroblasts, KC is expressed in macrophages and endothelial cells. Mouse KC is a potent neutrophil attractant and activator. The functional receptor for KC has been identified as CXCR2. Based on the pattern of KC expression in a number of inflammatory disease models, KC appears to have an important role in inflammation. KC was found to be involved in monocyte arrest on atherosclerotic endothelium and may also play a pathophysiological role in Alzheimer's disease. Many chemokines are substrates for selective proteolysis at the amino-terminus by various proteases including dipeptidyl peptidase IV or matrix metalloproteases, resulting in truncated chemokine isoforms with different (both enhanced or reduced) bioactivities. The naturally occurring 68 aa N-terminal truncated isoform of mouse KC is reported to be a more potent synergistic growth stimulants for CFU-GM.