Human/Primate CXCL1/GROα/KC/CINC-1 Alexa Fluor® 488-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 20326

Catalog Number: IC275G

100 µg

DESCRIPTION

Species Reactivity	Human/Primate
Specificity	Detects human CXCL1/GROα/KC/CINC-1 in ELISAs and Western blots. In Western blots, this antibody shows approximately 20% cross-reactivity with recombinant human (rh) CXCL2/GROβ and rhCXCL3/GROγ and no cross-reactivity with recombinant rat (rr)CINC-1, rrCINC-2α, rrCINC-2β, rrCINC-3, rhMIP-1α, recombinant mouse (rm)MIP-1α, rmMIP-1β, rmMIP-1β, rhMIP-1δ, rmMIP-1γ, rmMIP-2, rhMIP-3α, rmMIP-3α, rrMIP-3α, rhMIP-3β, or rmMIP-3β.
Source	Monoclonal Mouse IgG_{2B} Clone # 20326
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human CXCL1/GROα/KC/CINC-1
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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.*

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	0.25-1 µg/10^6 cells	Human peripheral blood mononuclear cell (PBMCs) treated with LPS and monensin were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005)

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

The gene for CXCL1/GROα was initially discovered in hamster cells, using subtractive hybridization techniques, as a message that is over-expressed in tumorigenic cells and in normal cells during growth stimulation. The hamster cDNA was cloned and used as a probe for the subsequent cloning of the human GRO cDNA. Independently, a cDNA encoding a secreted protein with melanoma growth stimulating activity (MGSA) was also cloned from a human melanoma cell line and found to be identical to GRO. In addition to the initially cloned GRO gene, now designated CXCL1, two additional GRO genes, GROβ or MIP-2α and GROγ or MIP-2β, which shared 90% and 86% amino acid sequence homology, respectively, with CXCL1, have been identified. All three human GROs are members of the alpha (C-X-C) subfamily of chemokines.

The three GRO cDNAs encode 107 amino acid precursor proteins from which the N-terminal 34 amino acid residues are cleaved to generate the mature GROs. There are no potential N-linked glycosylation sites in the amino acid sequences. GRO expression is inducible by serum or PDGF and/or by a variety of inflammatory mediators, such as IL-1 and TNF, in monocytes, fibroblasts, melanocytes, and epithelial cells. In certain tumor cell lines, GRO is expressed constitutively.

Similar to other alpha chemokines, the three GRO proteins are potent neutrophil attractants and activators. In addition, these chemokines are also active toward basophils. All three GROs can bind with high affinity to the IL-8 receptor type B. It remains to be seen if a unique GRO receptor(s) also exist. The rat homolog of human CXCL1, CINC, is much more active than human CXCL1 on rat neutrophils, suggesting that this cytokine may have selective species specificity.

PRODUCT SPECIFIC NOTICES

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