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ProductInformation

ANTI-MOUSE MACROPHAGE INFLAMMATORY PROTEIN-2 (MIP-2)
Affinity Isolated Antibody, Developed in Goat

Product No. **M5539**

Anti-Mouse Macrophage Inflammatory Protein-2 (MIP-2) was developed in goat using recombinant, mouse MIP-2, expressed in *E. coli*, as the immunogen. Affinity isolated antigen specific antibody is obtained from goat anti-mouse M IP-2 antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to mouse MIP-2. Goat Anti-Mouse MIP-2 is provided 0.2 µm-filtered and lyophilized from phosphate buffered saline, (PBS) pH 7.4 , to which no preservatives have been added.

Description
MIP-2 is a member of the C-X-C, or a chemokine class. It contains the ELR domain immediately preceding the first cysteine residue near the amino terminus. Other chemokines in this group include IL-8, GROa/ß/?, mouse KC, ENA-78, GCP-2, PBP/CTAPIII/ß-TG/NAP-2. These chemokines act primarily on neutrophils as chemoattractants and activators, including neutrophil degradation with release of myloperoxidase and other enzymes. MIP-2 was originally identified as a heparin-binding protein secreted from a murine macrophage cell line in response to endotoxin stimulation. MIP-2 is an approximately 8 kD polypeptide of 73 amino acids. The precursor form of MIP-2 consists of 100 amino acids. To generate the mature MIP-2, the precursor cleaves its amino-terminal 27 amino acids. MIP-2 shows 60% amino acid homology to human GROß and GRO?.

Performance
Anti-Mouse MIP-2 is tested for its ability to neutralize the biological activity of rmMIP-2 on human neutrophils.[1] The ND_{50} of the antibody is defined as the concentration of antibody resulting in a one-half maximal inhibition of bioactivity of rmMIP-2 that is present at a concentration just high enough to elicit a maximum response. In this bioassay, 1 µg/ml rmMIP-2 was mixed with various dilutions of the antibody for 1 hour at 37°C. After preincubation, cytochalasin-B treated human neutrophils were added to the antigen-antibody mixture in a 96-well plate. The assay mixture was incubated at 37°C for 60 minutes. After incubation, supernatants from each well were assayed for myeloperoxidase release.
The antibody may also be used in immunoblotting and ELISA. By ELISA, the antibody does not cross-react with other cytokines tested.*

Product Information

Mass/vial:	100 µg
Immunogen:	Recombinant, mouse MIP-2
Host animal:	Goat
Formulation:	Lyophilized from PBS without additives.
Endotoxin:	< 1 ng/vial by LAL method
Bioactivity:	ND_{50} = 5 - 100 µg/ml
Direct ELISA:	0.5 - 1 µg/ml antibody detects < 0.06 ng/well of recombinant, mouse MIP-2.
Indirect Immunoblotting:	0.1 -0.2 µg/ml antibody detects 1 and 0.5 ng/lane of recombinant, mouse MIP-2 under reducing and non-reducing conditions, respectively.
Sterility:	0.2 µm-filtered, aseptic fill

Reconstitution and Use
To one vial of lyophilized powder, add 1 ml of 0.2 µm-filtered PBS to produce a 100 µg/ml stock solution of Anti-Mouse MIP-2. If aseptic technique is used, no further filtration should be needed for use in cell culture environments.

Storage
Prior to reconstitution, store at –20°C. Reconstituted product may be stored 2-8°C for a maximum of one month. For prolonged storage, freeze in working aliquots at –20°C. Avoid repeated freezing and thawing.

Reference
1. Schröder, J., et al., J. Immunol., **139**, 3474 (1987).

* rhANG, rhAnnexin V, rhAR, rhB7-1, rmB7-2, rhBTC, rhß-NGF, rhBDNF, rmC10, rhCD4, rhCD8, rhCD28, rhCNTF, rrCNTF, rhEGF, rhENA-78, rhEPO, rhFGFa, rhFGFb, rhFGF-4, rhFGF-5, rhFGF-6, rhFGF-7, rhFGF-9, rhG-CSF, rhG-CSF Ra, rmG-CSF, rhGDNF, rhGM-CSF, rhGM-CSF Ra, rmGM-CSF, rhHB-EGF, rhHRG-a, rhHGF, rhI-309, rhIFN-?, rmIFN-?, rhIGF-I, rhIGF-I R, rhIGF-II, rhIL-1a, rhIL-1 RI, rhIL-1 RII, rmIL-1a, rhIL-1ß, rmIL-1ß, rrIL-1ß, rhIL-1 ra, rmIL-1 ra, rhIL-2, rhIL-2 sRa, rhIL-2 sRß, rhIL-2 sR?, rmIL-2, rhIL-3, rhIL-3 sRa, rmIL-3, rhIL-4, rhIL-4 sR, rmIL-4, rhIL-5, rhIL-5 sRa, rhIL-5 sRß, rmIL-5, rhIL-6, rhIL-6 sR, rmIL-6, rhIL-7, rhIL-7 R, rmIL-7, rhIL-8, rhIL-9, rmIL-9, rhIL-10, rhIL-10 sR, rmIL-10, rmIL-10 sR, rhIL-11, rhIL-12, rmIL-12, rhIL-13, rmIL-13, rhIL-15, rhIP-10, rhJAK-1, rmJAK-1, rmJAK-2, rmJE, rmKC, rhLIF, rhLIF R, rmLIF, rhM-CSF, rmM-CSF, rhMCP-1, rhMCP-1 R, rhMCP-2, rhMCP-3, rhMidkine, rhMIF, rhMIP-1a, rmMIP-1a, rhMIP-1ß, rmMIP-1ß, rhNT-3, rhNT-4, rhOSM, rhPD-ECGF, hPDGF, pPDGF, rhPDGF-AA, rhPDGF-AB, rhPDGF-BB, rhPDGF Ra, rhPlGF, rhPTN, rhRANTES, rhSCF, rmSCF, rhsgp130, rhSLPI, rhSTAT-1, rmSTAT-3, rmSTAT-4, hTfR, rhTGF-a, rhTGF-ß1, rhTGF-ß2, rhTGF-ß3, raTGF-ß5, rhLAP (TGF-ß1), rhLatent TGF-ß1, rhTGF-ß sRII, rhTGF-ß sRIII, rhTNF-a, rmTNF-a, rrTNF-a, rhTNF-ß, rhsTNF RI, rhsTNF RII, rhTPO, rmTPO, rhVEGF.

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