

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CXCL10/IP-10/CRG-2 in ELISAs and Western blots. In sandwich immunoassays, less than 0.5% cross-reactivity with recombinant human IP-10, recombinant mouse (rm) PF4, rmMIG, rmlLIX, and rml-TAC is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse CXCL10/IP-10/CRG-2 (R&D Systems, Catalog # 466-CR) Ile22-Pro98 Accession # Q548V9
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. 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 CXCL10/IP-10/CRG-2 (Catalog # 466-CR)
Immunohistochemistry	5-15 µg/mL	Perfusion fixed frozen sections of mouse thymus and Peyer's Patches (intestine)
Mouse CXCL10/IP-10/CRG-2 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Mouse CXCL10/IP-10/CRG-2 Antibody (Catalog # MAB466)
ELISA Detection	0.1-0.4 µg/mL	Mouse CXCL10/IP-10/CRG-2 Biotinylated Antibody (Catalog # BAF466)
Standard		Recombinant Mouse CXCL10/IP-10/CRG-2 (Catalog # 466-CR)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile Tris-buffered saline, pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% bovine serum albumin.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month from date of receipt, 2 to 8 °C, reconstituted. ● 6 months from date of receipt, -20 to -70 °C, reconstituted.

BACKGROUND

The gene for CRG-2, a mouse homolog of human IP-10, was originally identified as an immediate early gene induced in response to macrophage activation. It has been shown that CRG-2 mRNA is induced by $\alpha/\beta\gamma$ -interferons and by lipopolysaccharide in macrophages, astrocytes and microglia. Human IP-10 was also shown to be expressed in activated T-lymphocytes, splenocytes, keratinocytes, osteoblasts, astrocytes, and smooth muscle cells. Mouse CRG-2 cDNA encodes a 98 amino acid (aa) residue precursor protein with a 21 aa residue signal peptide that is cleaved to form the 77 aa residue secreted mature protein. Mature CRG-2 shares approximately 67% amino acid sequence identity with human IP-10. The amino acid sequence of CRG-2 identified the protein as a member of the chemokine α subfamily that lacks the ELR domain. CRG-2 has been shown to be a chemoattractant for activated T-lymphocytes. Human IP-10 has also been reported to be a potent inhibitor of angiogenesis and to display a potent thymus-dependent anti-tumor effect. A chemokine receptor specific for IP-10 and MIG (CXCR3) has been cloned and shown to be highly expressed in IL-2-activated T-lymphocytes.

References:

1. Loetscher, M. *et al.* (1996) *J. Exp. Med.* **184**:963.
2. Vanguri, P. (1996) *J. Neuroimmunol.* **56**:35.
3. Sgadari, C. *et al.* (1996) *Blood*, **87**:3877.