

## DESCRIPTION

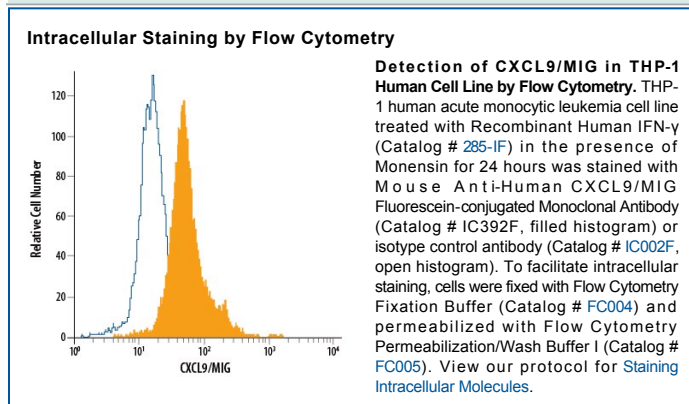
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human CXCL9/MIG in ELISAs and Western blots. In ELISAs, does not cross-react with recombinant mouse (rm) CXCL9, recombinant human CXCL10.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 49106
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human CXCL9/MIG Thr23-Thr125 Accession # Q07325
<b>Conjugate</b>	Fluorescein Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
<b>Formulation</b>	Supplied 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	10 µL/10 <sup>6</sup> cells	See Below

## DATA



## PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

## BACKGROUND

CXCL9, a member of the α subfamily of chemokines that lack the ELR domain, was initially identified as a lymphokine-activated gene in mouse macrophages. Human CXCL9 was subsequently cloned using mouse MIG cDNA as a probe. The CXCL9 gene is induced in macrophages and in primary glial cells of the central nervous system specifically in response to IFN-γ. CXCL9 has been shown to be a chemoattractant for activated T-lymphocytes and TIL but not for neutrophils or monocytes. The human CXCL9 cDNA encodes a 125 amino acid (aa) residue precursor protein with a 22 aa residue signal peptide that is cleaved to yield a 103 aa residue mature protein. CXCL9 has an extended carboxy-terminus containing greater than 50% basic aa residues and is larger than most other chemokines. The carboxy-terminal residues of CXCL9 are prone to proteolytic cleavage resulting in size heterogeneity of natural and recombinant CXCL9. CXCL9 with large carboxy-terminal deletions have been shown to have diminished activity in the calcium flux assay. A chemokine receptor (CXCR3) specific for CXCL9 and IP-10 has been cloned and shown to be highly expressed in IL-2-activated T-lymphocytes. The *E. coli*-expressed CXCL9 preparations produced at R&D Systems have been shown to contain greater than 80% full length CXCL9.

## References:

- Loetscher, M. *et al.* (1996) *J. Exp. Med.* **184**:963.
- Liao, F. *et al.* (1995) *J. Exp. Med.* **182**:1301.
- Vanguri, P. (1995) *J. Neuroimmunol.* **56**:35.