

DESCRIPTION

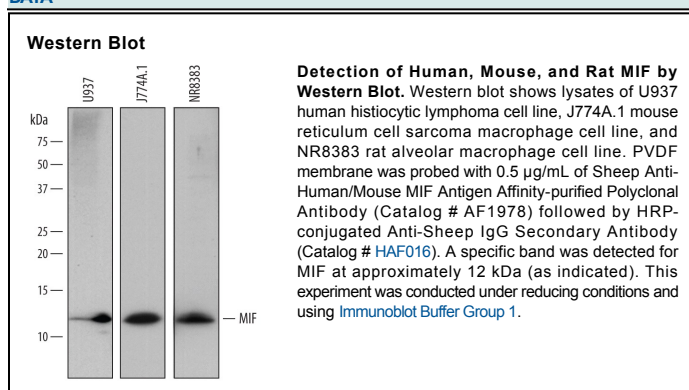
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human and mouse MIF in direct ELISAs and human, mouse and rat MIF in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse MIF Pro2-Ala115 Accession # NP_034928
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

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	0.5 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 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

MIF (Macrophage Inhibitory Factor; also GIF) is a 12-13 kDa member of the MIF family of proteins. Although secreted, it possesses no definitive signal sequence. MIF is widely expressed, and serves to regulate immune reactions. On macrophages and B cells, MIF binds to a CD74:CD44 complex, initiating downstream signaling. On monocytes, this promotes TNF-α production plus IFN-γ-stimulated NO production. On B cells, this promotes B cell survival. MIF also binds to leukocyte CD74:CXCR2 and CD74:CXCR4 heterodimers, initiating T cell and monocyte migration. A tautomerase activity has also been shown for MIF, but the significance of this is unclear. Mouse MIF is 114 amino acids (aa) in length. Its tautomerase activity is suggested to involve the entire length of the molecule. MIF is phosphorylated at Ser91, and an additional, singular Cys residue is covalently linked to MIF at Cys60. MIF is considered to act as a homotrimer. Full-length mouse MIF shows 90% and 99% aa sequence identity with human and rat MIF, respectively.