Mouse/Rat MIF Antibody

Monoclonal Rat IgG_{2A} Clone # 811429

Catalog Number: MAB1978

DESCRIPTION

Species Reactivity	Mouse/Rat
Specificity	Detects mouse MIF in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human MIF is observed.
Source	Monoclonal Rat IgG_{2A} Clone # 811429
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant mouse MIF Met1-Ala115 Accession # P34884
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.

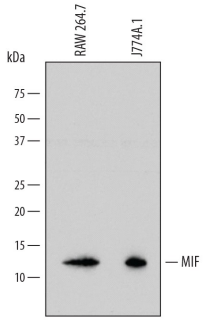
APPLICATIONS

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	2 µg/mL	See Below

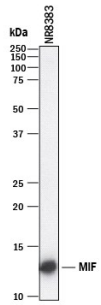
DATA

Western Blot



Detection of Mouse MIF by Western Blot. Western blot shows lysates of RAW 264.7 mouse monocyte/macrophage cell line and J774A.1 mouse reticulum cell sarcoma macrophage cell line. PVDF membrane was probed with 2 µg/mL of Rat Anti-Mouse/Rat MIF Monoclonal Antibody (Catalog # MAB1978) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). A specific band was detected for MIF at approximately 12 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Western Blot



Detection of Rat MIF by Western Blot. Western blot shows lysates of NR8383 rat alveolar macrophage cell line. PVDF membrane was probed with 2 µg/mL of Rat Anti-Mouse/Rat MIF Monoclonal Antibody (Catalog # MAB1978) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). A specific band was detected for MIF at approximately 12 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 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.** ● 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 TNFα 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 and is suggested to involve the entire length of the molecule. Mouse MIF is 114 amino acids (aa) in length. 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.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956