

Store at
-20C
#88186**MIF Antibody**

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R	Endogenous	12	Rabbit	#P14174	4282

Product Usage Information**Application**

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

MIF Antibody recognizes endogenous levels of total MIF protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Tyr100 of human MIF protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

MIF (macrophage migration inhibitory factor) is a pleiotropic cytokine that stimulates pro-inflammatory, chemotactic, and growth responses in cells (1). MIF binds its cognate receptor (a CD74/CD44 complex) to activate multiple signaling pathways such as Src, ERK, MAPK, Akt, and suppress p53-induced apoptosis (2). The interaction of MIF with non-cognate chemokine receptors CXCR2 and CXCR4 promotes chemotaxis that enables recruitment of monocytes/neutrophils and T cells (3). During an innate immune response, MIF has been shown to repress the inhibitory effects of glucocorticoids on macrophages and T cells, thus promoting host inflammation and immunity (4). MIF may also play roles in the progression of other disease processes, including cancer cell proliferation and metastasis, and angiogenesis (5), atherosclerotic plaque formation following myocardial ischemia (6), and autoimmune pathogenesis (7). MIF has thus been proposed as a promising therapeutic drug target for multiple indications.

Background References

1. Sparkes, A. et al. (2017) *Immunobiology* 222, 473-82.
2. Flaster, H. et al. (2007) *Mol Endocrinol* 21, 1267-80.
3. Tillmann, S. et al. (2013) *Front Immunol* 4, 115.
4. Calandra, T. and Bucala, R. (2017) *Crit Rev Immunol* 37, 359-70.
5. Kindt, N. et al. (2016) *Oncol Lett* 12, 2247-53.
6. Tilstam, P.V. et al. (2017) *Expert Opin Ther Targets* 21, 671-83.
7. Bilsborrow, J.B. et al. (2019) *Expert Opin Ther Targets* 23, 733-44.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.