

Product datasheet

Anti-M-CSF antibody [EPR20948] ab233387

Recombinant RabMAb

★★★★☆ 1 Abreviews 4 References 9 Images

Overview

Product name	Anti-M-CSF antibody [EPR20948]
Description	Rabbit monoclonal [EPR20948] to M-CSF
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: U937, P388D1, J774A.1, Jurkat, MDA-MB-231, K562, C6, PC-12 and NIH/3T3 whole cell lysates; Human tonsil, brain and kidney lysates. IHC-P: Human colon and bladder cancer tissues; Mouse and rat colon tissues. ICC/IF: Jurkat cells. Flow Cyt (intra): Jurkat cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20948

Isotype

IgG

Applications

The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab233387 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/500.
WB		1/1000. Detects a band of approximately 43 kDa (predicted molecular weight: 60 kDa).
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/100.

Target

Function

Granulocyte/macrophage colony-stimulating factors are cytokines that act in hematopoiesis by controlling the production, differentiation, and function of 2 related white cell populations of the blood, the granulocytes and the monocytes-macrophages. CSF-1 induces cells of the monocyte/macrophage lineage. It plays a role in immunological defenses, bone metabolism, lipoproteins clearance, fertility and pregnancy.

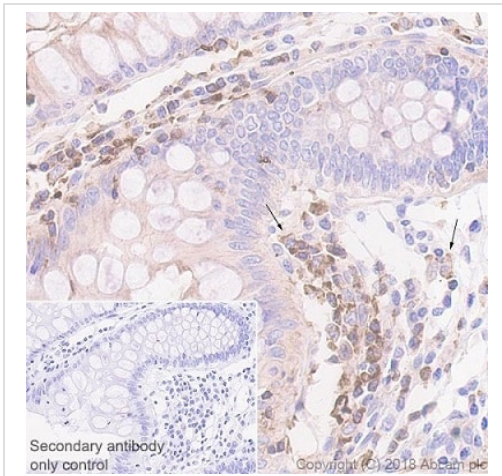
Post-translational modifications

Glycosylation and proteolytic cleavage yield different soluble forms. A high molecular weight soluble form is a proteoglycan containing chondroitin sulfate. Isoform 1 is N- and O-glycosylated. Isoform 3 is N-glycosylated.

Cellular localization

Cell membrane and Secreted > extracellular space.

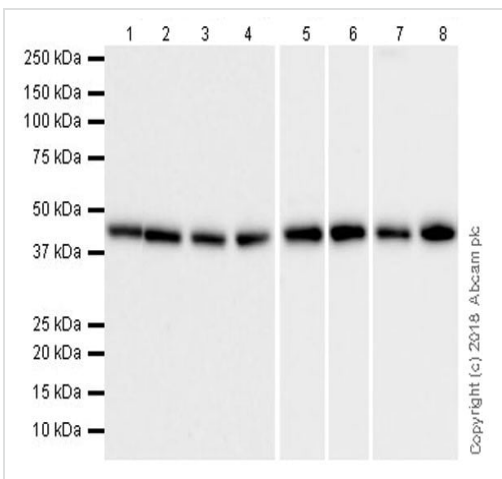
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-M-CSF antibody [EPR20948] (ab233387)

Immunohistochemical analysis of paraffin-embedded human colon tissue labeling M-CSF with ab233387 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Counter stained with hematoxylin. Heat-mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). Positive staining on stromal cells (arrows) and weak staining on epithelium of human colon (PMID: 15519852; PMID: 11745698).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.



Western blot - Anti-M-CSF antibody [EPR20948] (ab233387)

All lanes : Anti-M-CSF antibody [EPR20948] (ab233387) at 1/1000 dilution

Lane 1 : U937 (human histiocytic lymphoma cell line) whole cell lysate

Lane 2 : P388D1 (mouse lymphoma monocyte; macrophage cell line) whole cell lysate

Lanes 3 & 7 : J774A.1 (mouse reticulum cell sarcoma monocyte macrophage cell line) whole cell lysate

Lane 4 : Human tonsil lysate

Lane 5 : Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate

Lane 6 : MDA-MB-231 (human breast adenocarcinoma cell line) whole cell lysate

Lane 8 : K562 (human chronic myelogenous leukemia cell line from bone marrow) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

Developed using the ECL technique.

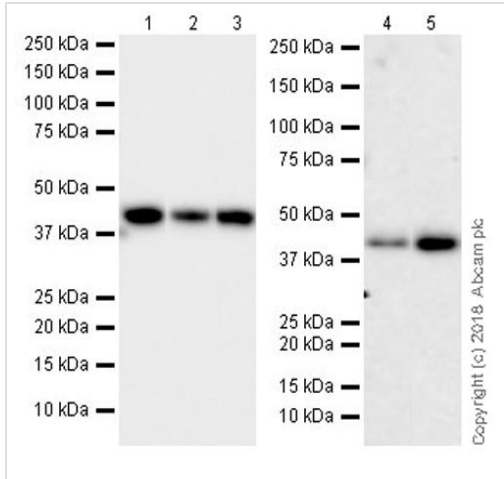
Predicted band size: 60 kDa

Observed band size: 43 kDa

Exposure time : Lanes 1-4: 3 minutes; Lanes 5: 6 seconds; Lanes 6-8: 26 seconds.

Blocking/Dilution buffer: 5% NFDM/TBST.

The molecular mass observed is consistent with what has been described in the literature (PMID: 21502940; PMID: 3264877).



Western blot - Anti-M-CSF antibody [EPR20948] (ab233387)

All lanes : Anti-M-CSF antibody [EPR20948] (ab233387) at 1/1000 dilution

Lane 1 : C6 (rat glial tumor cell line) whole cell lysate

Lane 2 : PC-12 (rat adrenal gland pheochromocytoma cell line) whole cell lysate

Lane 3 : NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate

Lane 4 : Human brain lysate

Lane 5 : Human kidney lysate

Lysates/proteins at 10 µg per lane.

Secondary

Lanes 1-3 : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

Lanes 4-5 : VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/2000 dilution

Developed using the ECL technique.

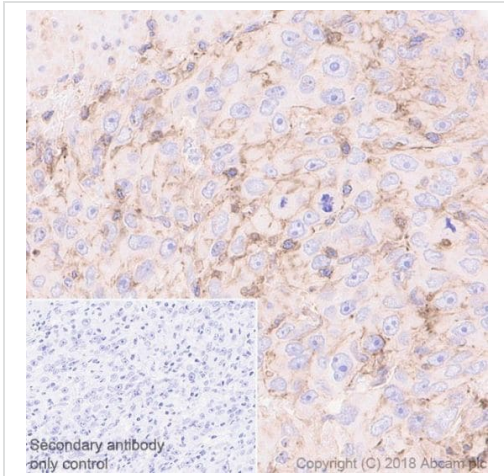
Predicted band size: 60 kDa

Observed band size: 43 kDa

Exposure time : Lanes 1-3: 3 minutes; Lanes 4-5:10 seconds.

Blocking/Dilution buffer: 5% NFDM/TBST.

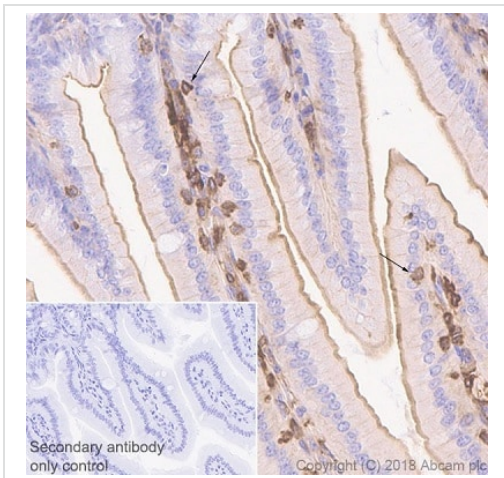
The molecular mass observed is consistent with what has been described in the literature (PMID: 21502940; PMID: 3264877).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-M-CSF antibody [EPR20948] (ab233387)

Immunohistochemical analysis of paraffin-embedded human bladder cancer tissue labeling M-CSF with ab233387 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Counter stained with hematoxylin. Heat-mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). Membranous and weak cytoplasmic staining on human bladder cancer (PMID: 25082815; PMID: 25667468) is observed.

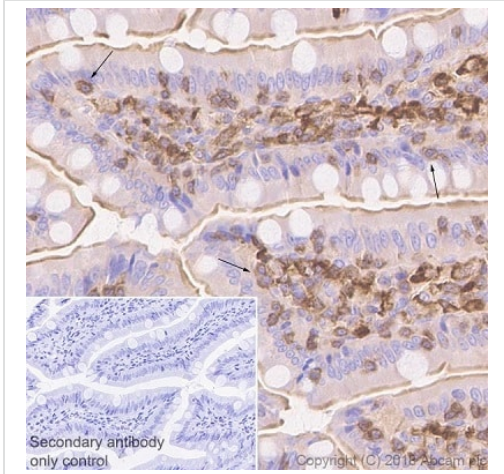
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-M-CSF antibody [EPR20948] (ab233387)

Immunohistochemical analysis of paraffin-embedded mouse colon tissue labeling M-CSF with ab233387 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Counter stained with hematoxylin. Heat-mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). Positive staining on stromal cells (arrows) and weak staining on epithelium of mouse colon (PMID: 15519852; PMID: 11745698).

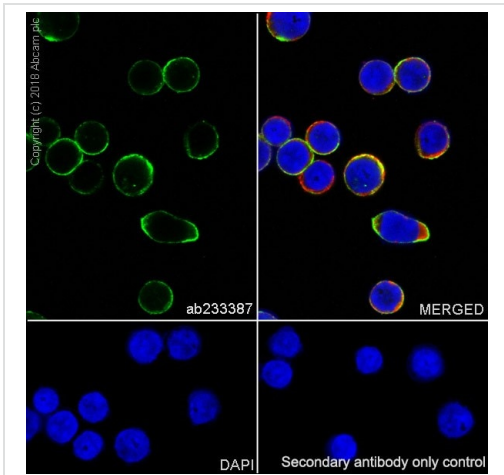
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-M-CSF antibody [EPR20948] (ab233387)

Immunohistochemical analysis of paraffin-embedded rat colon tissue labeling M-CSF with ab233387 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Counter stained with hematoxylin. Heat-mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). Positive staining on stromal cells (arrows) and weak staining on epithelium of rat colon (PMID: 15519852; PMID: 11745698)

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

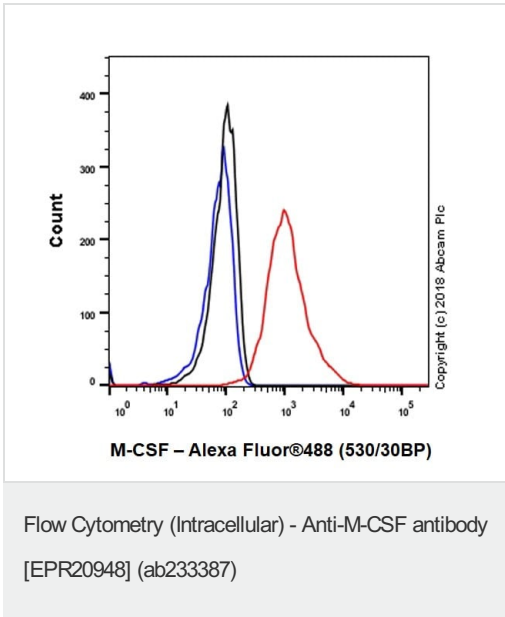


Immunocytochemistry/ Immunofluorescence - Anti-M-CSF antibody [EPR20948] (ab233387)

Immunofluorescent analysis of 100% methanol-fixed Jurkat (human T cell leukemia cell line from peripheral blood) cells labeling M-CSF with ab233387 at 1/100 dilution followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining in Jurkat cell line.




The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594) (ab195889) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution.



Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized Jurkat (human T cell leukemia cell line from peripheral blood) cells labeling M-CSF with ab233387 at 1/500 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) at 1/2000 dilution was used as the secondary antibody.

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-M-CSF antibody [EPR20948] (ab233387)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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