

## Product datasheet

### Anti-M-CSF antibody [EPR20948] ab233387

Recombinant RabMAb

★★★★★ 1 Abreviews 6 References 9 Images

#### Overview

Product name	Anti-M-CSF antibody [EPR20948]
Description	Rabbit monoclonal [EPR20948] to M-CSF
Host species	Rabbit
Tested applications	<b>Suitable for:</b> Flow Cyt (Intra), WB, IHC-P, ICC/IF
Species reactivity	<b>Reacts with:</b> 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"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</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

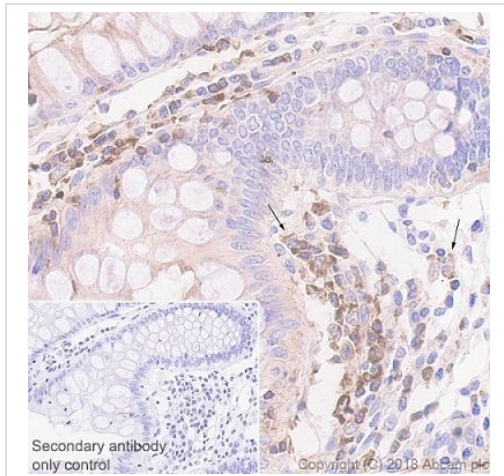
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab233387 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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

<b>Function</b>	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.
<b>Post-translational modifications</b>	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.
<b>Cellular localization</b>	Cell membrane and Secreted > extracellular space.

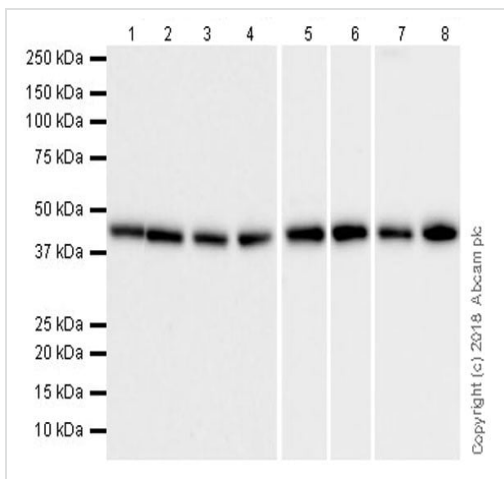
## Images



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.

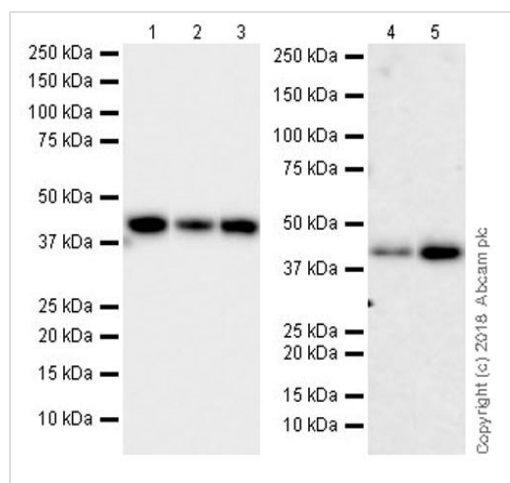
**Predicted band size:** 60 kDa

**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.

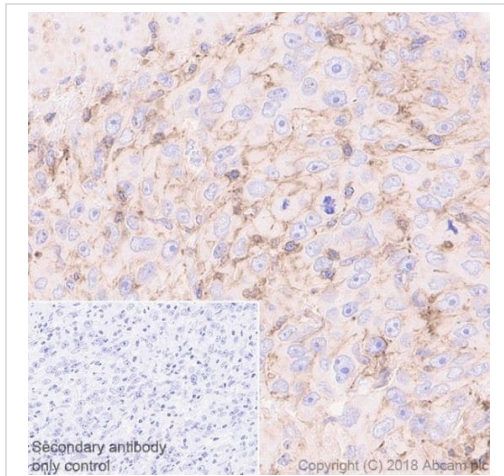
**Predicted band size:** 60 kDa

**Observed band size:** 43 kDa

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

Blocking/Dilution buffer: 5% NFDM/TBST.

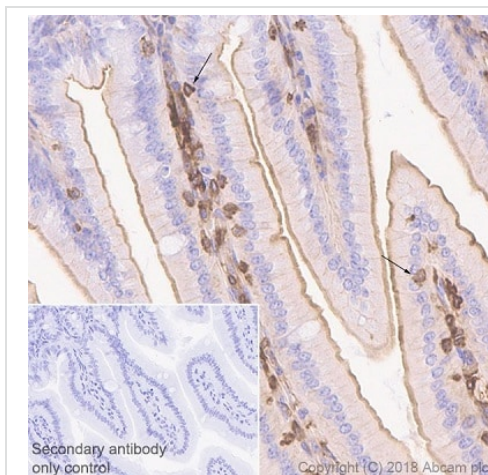
The molecular mass observed is consistent with what has been described in the literature (PMID: 21502940; PMID: 3264877).



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.

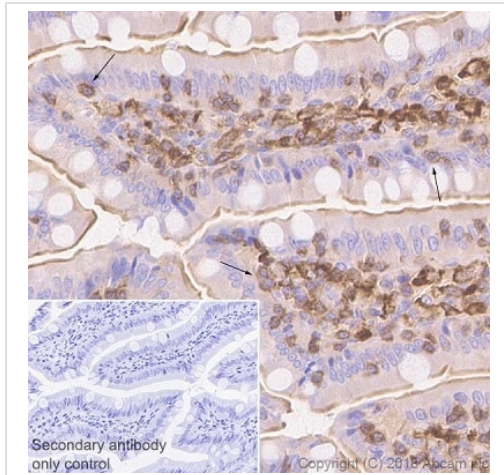
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.



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).

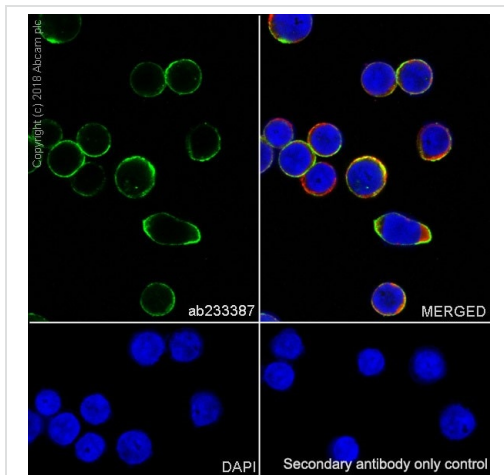
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.



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.



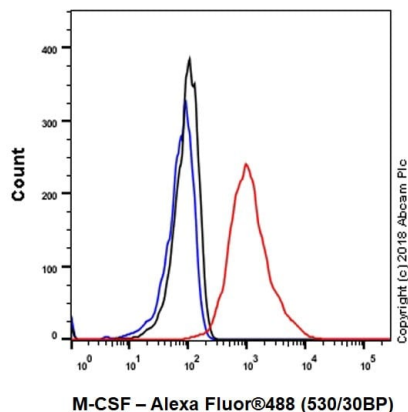
Immunocytochemistry/ Immunofluorescence - Anti-M-CSF antibody [EPR20948] (ab233387)

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.

Flow Cytometry (Intracellular) - Anti-M-CSF antibody [EPR20948] (ab233387)

#### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

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

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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you

- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

#### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors