

## Product datasheet

# Anti-M-CSF antibody [EPR20948] - BSA and Azide free ab234259

Recombinant RabMAb

[7 Images](#)

### Overview

<b>Product name</b>	Anti-M-CSF antibody [EPR20948] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR20948] to M-CSF - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	IHC-P: Human colon tissue.
<b>General notes</b>	<p>ab234259 is the carrier-free version of <a href="#">ab233387</a>.</p> <p>Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <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

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR20948
<b>Isotype</b>	IgG

## Applications

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**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab234259 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)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 43 kDa (predicted molecular weight: 60 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.

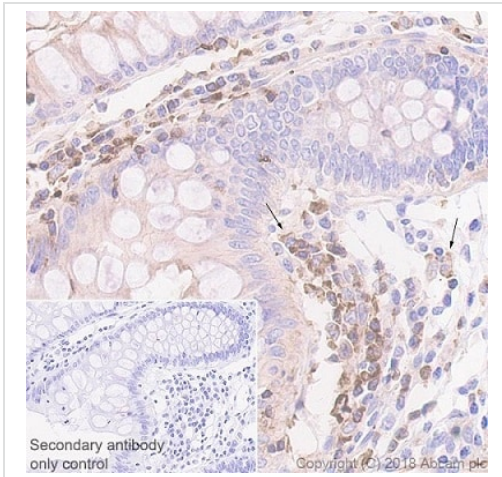
## Target

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<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

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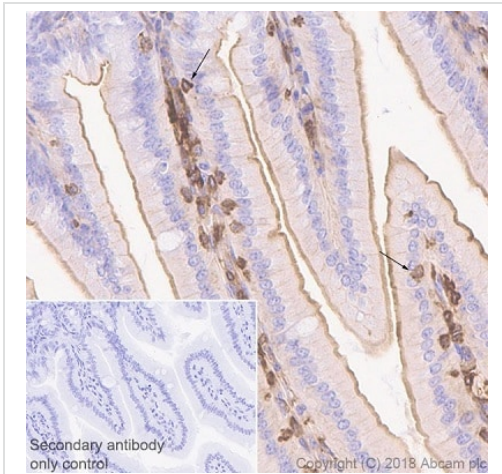


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-M-CSF antibody [EPR20948] - BSA and Azide free (ab234259)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab233387**).

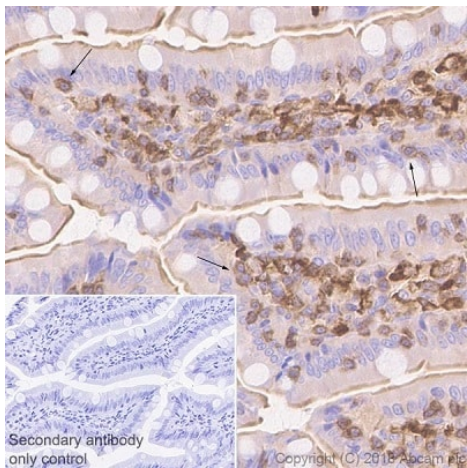


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-M-CSF antibody [EPR20948] - BSA and Azide free (ab234259)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab233387**).

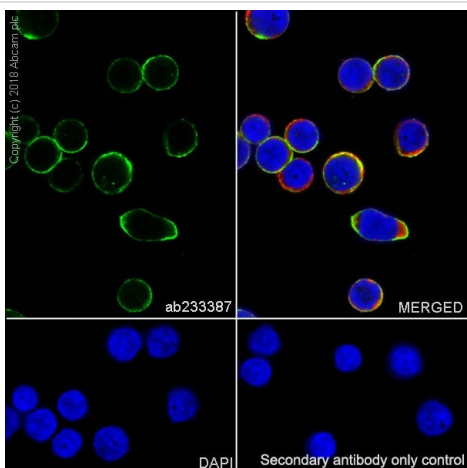


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-M-CSF antibody [EPR20948] - BSA and Azide free (ab234259)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab233387**).



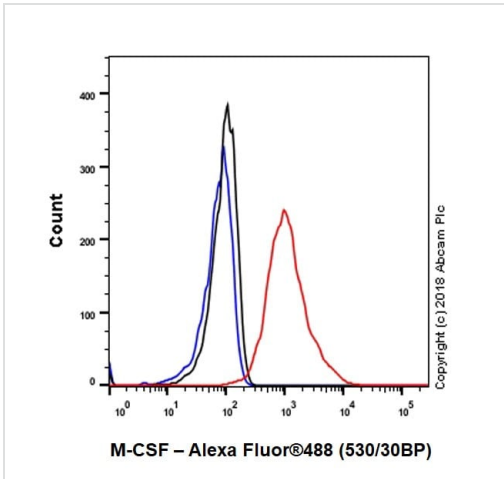
Immunocytochemistry/ Immunofluorescence - Anti-M-CSF antibody [EPR20948] - BSA and Azide free (ab234259)

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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 488) (**ab150077**) secondary antibody at 1/1000 dilution.

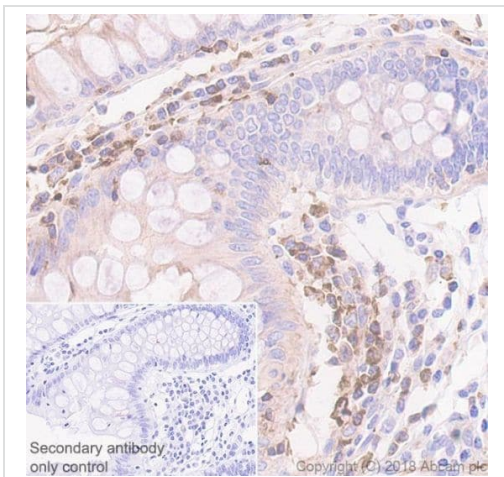
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab233387**).



Flow Cytometry (Intracellular) - Anti-M-CSF antibody [EPR20948] - BSA and Azide free (ab234259)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab233387**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-M-CSF antibody [EPR20948] - BSA and Azide free (ab234259)

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. Positive staining on stromal cells and weak staining on epithelium of human colon (PMID: 15519852; PMID:11745698) is observed. Counter stained with hematoxylin.

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab233387**).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

### 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] - BSA and Azide free (ab234259)

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

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