

## Product datasheet

# Anti-GPNMB antibody [EPR18226-147] - BSA and Azide free ab234529

Recombinant RabMAb

[4 Images](#)

### Overview

<b>Product name</b>	Anti-GPNMB antibody [EPR18226-147] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR18226-147] to GPNMB - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, ICC/IF, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse
<b>Immunogen</b>	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	ICC/IF: L-929 cells.
<b>General notes</b>	<p>ab234529 is the carrier-free version of <a href="#">ab188222</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 <a href="#">conjugation kits</a> 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>	EPR18226-147
<b>Isotype</b>	IgG

## Applications

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**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab234529 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 65, 95, 120 kDa (predicted molecular weight: 64 kDa).
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.

## Target

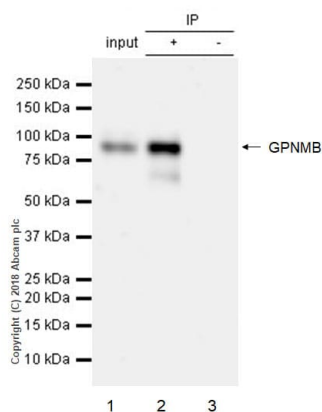
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<b>Function</b>	Could be a melanogenic enzyme.
<b>Tissue specificity</b>	Not restricted to the melanocytic lineage.
<b>Sequence similarities</b>	Belongs to the PMEL/NMB family. Contains 1 PKD domain.
<b>Developmental stage</b>	Expression in poorly metastatic melanoma cell lines; no expression in highly metastatic melanoma cell lines.
<b>Cellular localization</b>	Membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

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## Images

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Immunoprecipitation - Anti-GPNMB antibody  
[EPR18226-147] - BSA and Azide free (ab234529)

GPNMB was immunoprecipitated from 0.35 mg of L-929 (mouse connective tissue fibroblast cell line) whole cell lysate with **ab188222** at 1/30 dilution. Western blot was performed from the immunoprecipitate using **ab188222** at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/5000 dilution.

Lane 1: L-929 whole cell lysate 10 µg (Input).

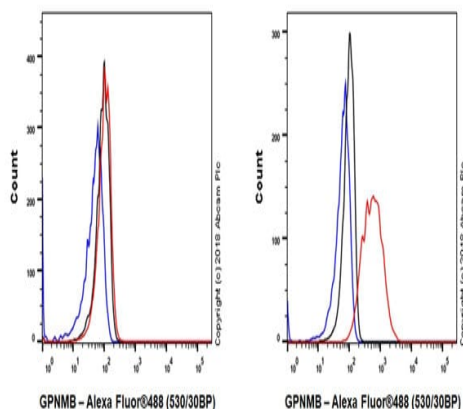
Lane 2: **ab188222** IP in L-929 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab188222** in L-929 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDN/TBST.

Exposure time: 1 minute.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab188222**).

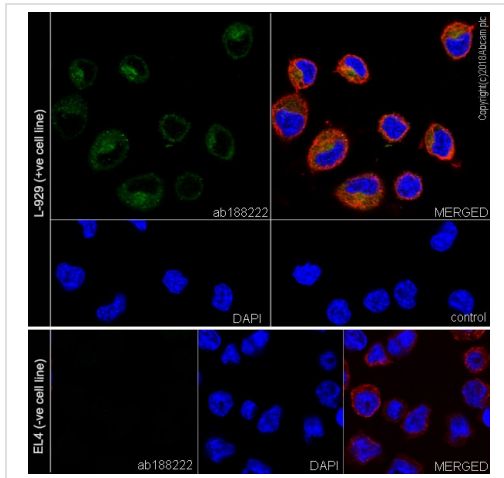


Flow Cytometry (Intracellular) - Anti-GPNMB antibody [EPR18226-147] - BSA and Azide free (ab234529)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized EL4 (mouse lymphoma T lymphocyte cell line; left panel) and L-929 (mouse connective tissue fibroblast cell line; right panel) cell lines labeling GPNMB with **ab188222** 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.

**Negative control:** EL4 (PMID: 19320736) (left panel).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab188222**).



Immunocytochemistry/ Immunofluorescence - Anti-GPNMB antibody [EPR18226-147] - BSA and Azide free (ab234529)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized L-929 (mouse connective tissue fibroblast cell line) and EL4 (mouse lymphoma T lymphocyte cell line) cells labeling GPNMB with **ab188222** at 1/1000 dilution followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Confocal image showing cytoplasmic staining in L-929 cells.

**Negative control:** EL4 (PMID:19320736).

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab188222**).

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-GPNMB antibody [EPR18226-147] - BSA and Azide free (ab234529)

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

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