

Product datasheet

Anti-GPNMB antibody [EPR22011-47] ab235873

Recombinant RabMAb

4 Images

Overview

Product name	Anti-GPNMB antibody [EPR22011-47]
Description	Rabbit monoclonal [EPR22011-47] to GPNMB
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: SK-MEL-28 whole cell lysate. ICC/IF: SK-MEL-28 cells. Flow Cyt (intra): SK-MEL-28 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	EPR22011-47
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab235873 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 95, 120 kDa (predicted molecular weight: 64 kDa).
ICC/IF		1/500.

Target

Function

Could be a melanogenic enzyme.

Tissue specificity

Not restricted to the melanocytic lineage.

Sequence similarities

Belongs to the PMEL/NMB family.
Contains 1 PKD domain.

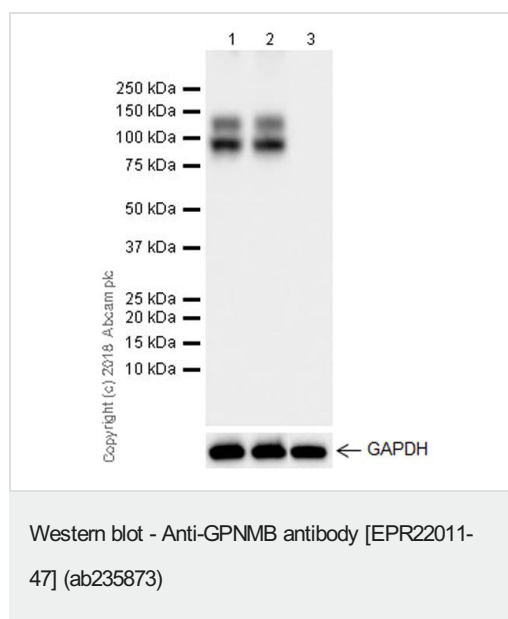
Developmental stage

Expression in poorly metastatic melanoma cell lines; no expression in highly metastatic melanoma cell lines.

Cellular localization

Membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

Images



All lanes : Anti-GPNMB antibody [EPR22011-47] (ab235873) at 1/1000 dilution

Lanes 1-2 : SK-MEL-28 (human malignant melanoma) whole cell lysate

Lane 3 : HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 64 kDa

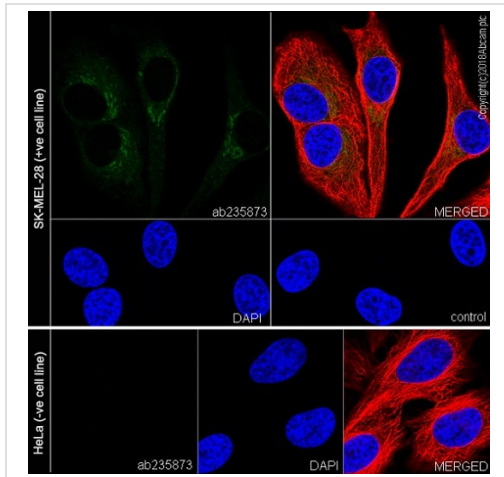
Observed band size: 120,95 kDa

Exposure time: 26 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

The molecular mass observed is consistent with what has been described in the literature (PMID: 19320736).

Negative control: HeLa (PMID: 20056711).



Immunocytochemistry/ Immunofluorescence - Anti-GPNMB antibody [EPR22011-47] (ab235873)

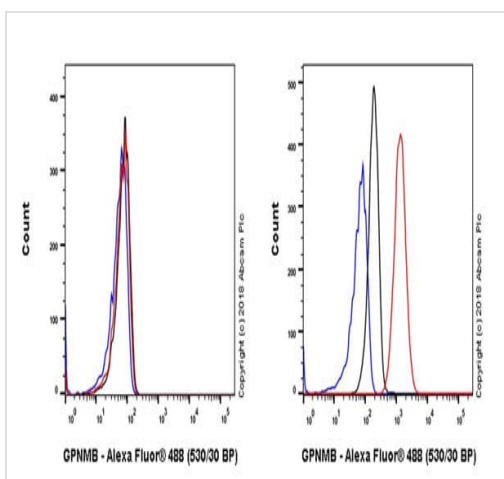
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized SK-MEL-28 (human malignant melanoma) and HeLa (human epithelial cell line from cervix adenocarcinoma) cells labeling GPNMB with ab235873 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Confocal image showing cytoplasmic staining in SK-MEL-28 cell line.

Negative control: HeLa □ PMID: 20056711.

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.



Flow Cytometry (Intracellular) - Anti-GPNMB antibody [EPR22011-47] (ab235873)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol permeabilized HeLa (human cervix adenocarcinoma epithelial cell, Left panel) and SK-MEL-28 (human malignant melanoma, Right panel) labeling GPNMB with ab235873 at 1/500 (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 (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.

Negative control: HeLa (PMID: 20056711).

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 [EPR22011-47] (ab235873)

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

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