# abcam

### Product datasheet

## Anti-GPNMB antibody [EPR22011-47] - BSA and Azide free ab236211



### 3 Images

#### Overview

**Product name** Anti-GPNMB antibody [EPR22011-47] - BSA and Azide free

**Description** Rabbit monoclonal [EPR22011-47] to GPNMB - BSA and Azide free

**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 ICC/IF: SK-MEL-28 cells.

**General notes** ab236211 is the carrier-free version of ab235873.

> Our carrier-free 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.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR22011-47

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab236211 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 95, 120 kDa (predicted molecular weight: 64 kDa).
ICC/IF		Use at an assay dependent concentration.

### **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.

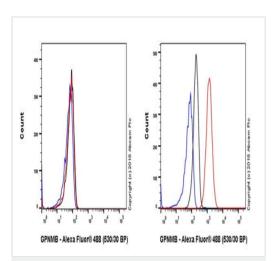
**Developmental stage** Expression in poorly metastatic melanoma cell lines; no expression in highly metastatic

melanoma cell lines.

**Cellular localization** Membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I

to stage IV.

#### **Images**

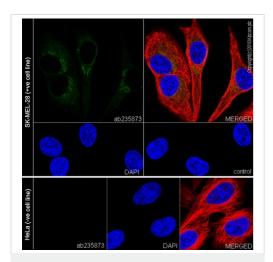


Flow Cytometry (Intracellular) - Anti-GPNMB antibody [EPR22011-47] - BSA and Azide free (ab236211)

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 <a href="mailto:ab235873">ab235873</a> at 1/500 (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (<a href="mailto:ab172730">ab172730</a>) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat anti rabbit IgG (Alexa Fluor 488, <a href="mailto:ab150077">ab150077</a>) at 1/2000 dilution was used as the secondary antibody.

Negative control: HeLa (PMID: 20056711).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab235873</u>).



Immunocytochemistry/ Immunofluorescence - Anti-GPNMB antibody [EPR22011-47] - BSA and Azide free (ab236211)

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 <a href="mailto:ab235873">ab235873</a> at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (<a href="mailto:ab150077">ab150077</a>) secondary antibody at 1/1000 dilution (green).

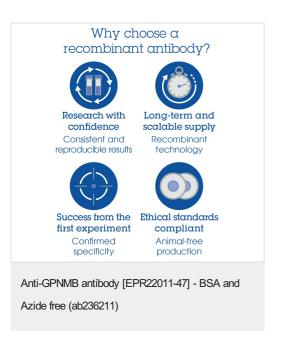
Confocal image showing cytoplasmic staining in SK-MEL-28 cell line.

**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<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 lgG 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 (ab235873).



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