

For Research Use Only

# GPNMB Recombinant antibody, PBS Only (Capture)

Catalog Number: 84160-3-PBS



## Basic Information

|   |   |   |
|---|---|---|
| <b>Catalog Number:</b><br>84160-3-PBS                       | <b>GenBank Accession Number:</b><br>BC011595          | <b>Purification Method:</b><br>Protein A purification |
| <b>Size:</b><br>100ug , Concentration: 1 mg/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>10457                        | <b>CloneNo.:</b><br>241435F3                          |
| <b>Source:</b><br>Rabbit                                    | <b>UNIPROT ID:</b><br>Q14956                          |   |
| <b>Isotype:</b><br>IgG                                      | <b>Full Name:</b><br>glycoprotein (transmembrane) nmb |   |
| <b>Immunogen Catalog Number:</b><br>AG14124                 | <b>Calculated MW:</b><br>64 kDa                       |   |
|   | <b>Observed MW:</b><br>120 kDa, 95 kDa                |   |

## Applications

**Tested Applications:**  
WB, IF/ICC, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

**Species Specificity:**  
human

## Product Information

84160-3-PBS targets GPNMB as part of a matched antibody pair:

MP01096-1: 84160-3-PBS capture and 84160-2-PBS detection (validated in Cytometric bead array, Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## Background Information

GPNMB also known as HGFIN, osteoactivin, and DC-HIL, is a type I membrane glycoprotein involved in various biological processes, including inflammation, invasion and metastasis of malignant tumors, cell differentiation, and tissue regeneration. GPNMB shows expression in the lowly metastatic human melanoma cell lines and xenografts but does not show expression in the highly metastatic cell lines. GPNMB acts as an osteogenic factor that stimulates osteoblast differentiation in vivo and in vitro.

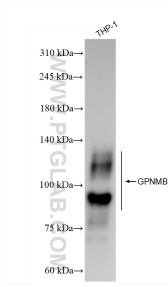
## Storage

**Storage:**  
Store at -80°C.  
**Storage Buffer:**  
PBS Only

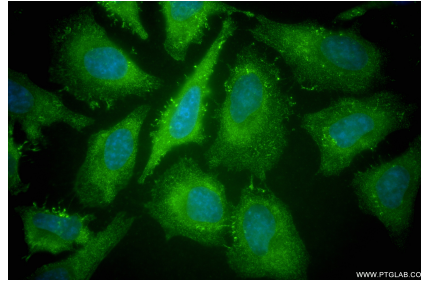
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

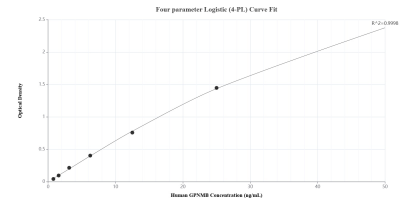
## Selected Validation Data



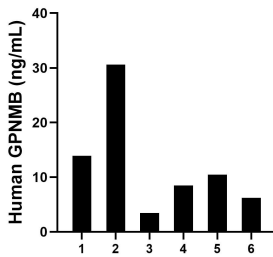
THP-1 cells were subjected to SDS PAGE followed by western blot with 84160-3-RR (GPNMB antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84160-3-PBS in a different storage buffer formulation.



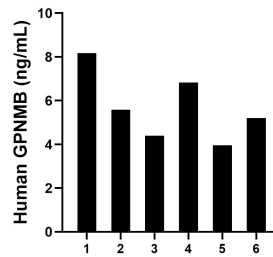
Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using GPNMB antibody (84160-3-RR, Clone: 241435F3) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 84160-3-PBS in a different storage buffer formulation.



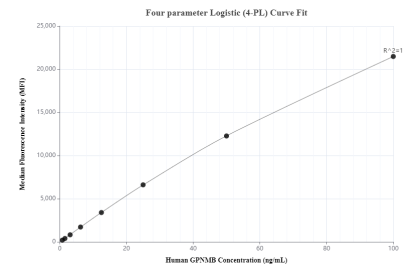
Sandwich ELISA standard curve of MP01096-1, Human GPNMB Recombinant Matched Antibody Pair - PBS only. 84160-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag14124. 84160-2-PBS was HRP conjugated as the detection antibody. Range: 0.781-50 ng/mL



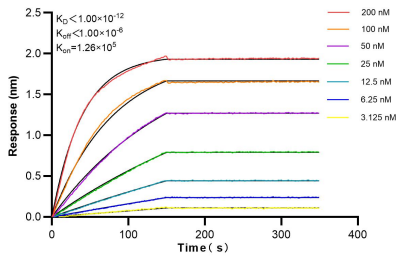
Plasma of six individual healthy human donors was measured. The GPNMB concentration of detected samples was determined to be 12.18 ng/mL with a range of 3.43-30.61 ng/mL



Serum of six individual healthy human donors was measured. The GPNMB concentration of detected samples was determined to be 5.69 ng/mL with a range of 3.96-8.17 ng/mL



Cytometric bead array standard curve of MP01096-1, GPNMB Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84160-3-PBS. Detection antibody: 84160-2-PBS. Standard: Ag14124. Range: 0.781-100 ng/mL



Biolayer interferometry (BLI) kinetic assays of 84160-3-RR against Human GPNMB were performed. The affinity constant is below 1 pM.