For Research Use Only

GPNMB Recombinant antibody, PBS Only (Capture)

Catalog Number:84160-3-PBS



Purification Method:

Protein A purification

CloneNo.:

241435F3

Basic Information

Catalog Number: GenBank Accession Number:

84160-3-PBS BC011595
Size: GeneID (NCBI):

 1 mg/ml
 10457

 Source:
 UNIPROT ID:

 Rabbit
 Q14956

 Isotype:
 Full Name:

IgG glycoprotein (transmembrane) nmb

Immunogen Catalog Number: Calculated MW: AG14124 64 kDa

Observed MW:

Observed MW: 120 kDa, 95 kDa

Applications

Tested Applications:

WB, IF/ICC, Cytometric bead array, Sandwich ELISA,

Indirect ELISA, Sample test

Species Specificity:

human

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

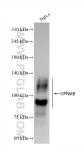
Storage:

Store at -80°C.

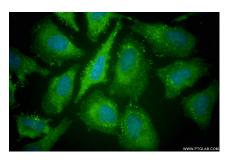
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS Only

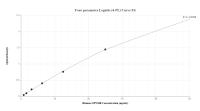
Selected Validation Data



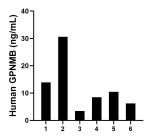
THP-1 cells were subjected to SDS PAGE followed by western blot with 84160-3-RR (GPNMB antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84160-3-PBS in a different storage buffer formulation.



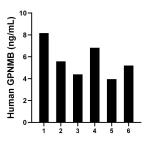
Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using GPNMB antibody (84160-3-RR, Clone: 241435F3) at dilution of 1:200 and CoraLite® 48-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 84160-3-PBS in a different storage buffer formulation.



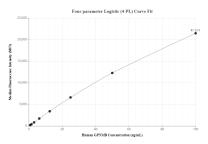
Sandwich ELISA standard curve of MP01096-1, Human GPNMB Recombinant Matched Antibody Pair - PBS only. 84160-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag14124. 84160-2-PBS was HRP conjugated as the detection antibody. Range: 0.781-50 ng/mL



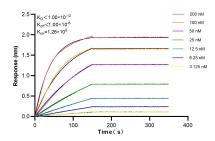
Plasma of six individual healthy human donors was measured. The GPNMB concentration of detected samples was determined to be 12.18 ng/mL with a range of 3.43-30.61 ng/mL



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, CPNMB 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.