

GPNMB (G-8): sc-271416



The Power to Question

BACKGROUND

Transmembrane glycoprotein NMB (GPNMB), also designated hematopoietic growth factor inducible neurokinin-1 (HGFIN), is a single-pass type I membrane protein. Belonging to the Pmel-17/NMB family of proteins, GPNMB acts as a melanogenic enzyme. GPNMB expression is not restricted to cells of melanocytic lineage and is highest in poorly metastatic melanoma cell lines. There is no expression of GPNMB in highly metastatic melanoma cell lines. GPNMB may play a important role in lymphohematopoietic stem cell maturation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GPNMB (human) mapping to 7p15.3.

SOURCE

GPNMB (G-8) is a mouse monoclonal antibody raised against amino acids 38-158 mapping near the N-terminus of GPNMB of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

GPNMB (G-8) is recommended for detection of GPNMB isoforms 1 and 2 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for GPNMB siRNA (h): sc-60721, GPNMB shRNA Plasmid (h): sc-60721-SH and GPNMB shRNA (h) Lentiviral Particles: sc-60721-V.

Molecular Weight of GPNMB: 64 kDa.

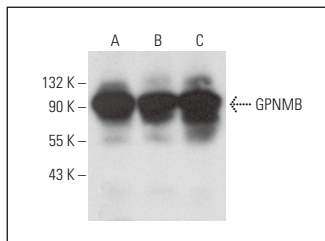
Molecular Weight of glycosylated GPNMB: 110-130 kDa.

Positive Controls: SK-MEL-28 cell lysate: sc-2236, A-375 cell lysate: sc-3811 or C32 whole cell lysate: sc-2205.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.
 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).
 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



GPNMB (G-8): sc-271416. Western blot analysis of GPNMB expression in SK-MEL-28 (A), C32 (B) and A-375 (C) whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.