

# GPNMB (N-15): sc-47008

## 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 lympho-hematopoietic stem cell maturation.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: GPNMB (human) mapping to 7p15.3; Gpnm (mouse) mapping to 6 B2.3.

## SOURCE

GPNMB (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of GPNMB of human origin.

## STORAGE

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

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-47008 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

GPNMB (N-15) is recommended for detection of mature HGFIN and GPNMB precursor isoforms 1 and 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

GPNMB (N-15) is also recommended for detection of mature HGFIN and GPNMB precursor isoforms 1 and 2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GPNMB siRNA (h): sc-60721, GPNMB siRNA (m): sc-60722, GPNMB shRNA Plasmid (h): sc-60721-SH, GPNMB shRNA Plasmid (m): sc-60722-SH, GPNMB shRNA (h) Lentiviral Particles: sc-60721-V and GPNMB shRNA (m) Lentiviral Particles: sc-60722-V.

Molecular Weight of GPNMB: 64 kDa.

Molecular Weight of glycosylated GPNMB: 110-130 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

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

## PROTOCOLS

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