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GPNMB Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17232b

Product Information

Application	WB, E
Primary Accession	Q14956
Other Accession	NP_002501.1, NP_001005340.1
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36977
Calculated MW	63923
Antigen Region	541-569

Additional Information

Gene ID	10457
Other Names	Transmembrane glycoprotein NMB, Transmembrane glycoprotein HGFIN, GPNMB, HGFIN, NMB
Target/Specificity	This GPNMB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 541-569 amino acids from the C-terminal region of human GPNMB.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GPNMB Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GPNMB
Synonyms	HGFIN {ECO:0000303|PubMed:12609765}, NMB

Function	Could be a melanogenic enzyme.
Cellular Location	Cell membrane; Single-pass type I membrane protein Melanosome membrane; Single-pass type I membrane protein. Early endosome membrane; Single-pass type I membrane protein. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV
Tissue Location	Widely expressed, but very low expression, if any, in the brain (PubMed:12609765, PubMed:16609006). Expressed in the epidermis with higher levels in melanocytes compared with keratinocytes and Langerhans cells (at protein level) (PubMed:29336782). Expressed in peripheral blood, but not bone marrow mononuclear cells (PubMed:12609765). Expressed in tissue macrophages, including liver Kuppfer cells and lung alveolar macrophages, in podocytes and in some cells of the ciliary body of the eye (at protein level) (PubMed:16489096). May be overexpressed in various cancers, including melanoma and glioblastoma multiforme (PubMed:16489096, PubMed:16609006, PubMed:7814155).

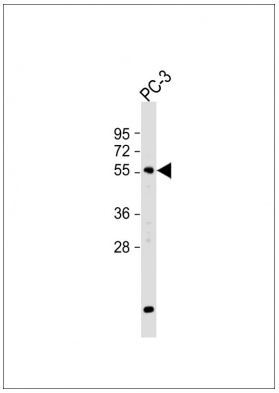
Background

The protein encoded by this gene is a type I transmembrane glycoprotein which shows homology to the pMEL17 precursor, a melanocyte-specific protein. 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 may be involved in growth delay and reduction of metastatic potential. Two transcript variants encoding different isoforms have been found for this gene.

References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Williams, M.D., et al. Melanoma Res. 20(3):184-190(2010)
Hoashi, T., et al. FASEB J. 24(5):1616-1629(2010)
Rose, A.A., et al. Clin. Cancer Res. 16(7):2147-2156(2010)
Rose, A.A., et al. PLoS ONE 5 (8), E12093 (2010) :

Images



Anti-GPNMB Antibody (C-term) at 1:500 dilution + PC-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 64 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.