

ARG10577 anti-Melanoma gp100 antibody [P14-V]

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Monoclonal antibody [P14-V] recognizes Melanoma gp100
Tested Reactivity	Hu
Tested Application	IHC-P
Host	Rabbit
Clonality	Monoclonal
Clone	P14-V
Isotype	IgG
Target Name	Melanoma gp100
Species	Human
Immunogen	Synthetic peptide around the C-terminus of Human Melanoma gp100.
Conjugation	Un-conjugated
Alternate Names	Premelanosome protein; SILV; ME20; Melanocyte protein Pmel 17; ME20-M; Secreted melanoma-associated ME20 antigen; 95 kDa melanocyte-specific secreted glycoprotein; Silver locus protein homolog; ME20S; D12S53E; SIL; P1; Melanocyte protein PMEL; PMEL17; ME20-S; Melanoma-associated ME20 antigen; gp100; ME20M; P100; SI; P26; Melanocytes lineage-specific antigen GP100

Application Instructions

Application table	Application	Dilution
	IHC-P	1:100 - 1:200
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Buffer	20 mM Tris-HCl (pH 8.0), 0.05% Sodium azide and 20 mg/ml BSA
Preservative	0.05% Sodium azide
Stabilizer	20 mg/ml BSA
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links

[GeneID: 6490 Human](#)

[Swiss-port # P40967 Human](#)

Gene Symbol

PMEL

Gene Full Name

premelanosome protein

Background

This gene encodes a melanocyte-specific type I transmembrane glycoprotein. The encoded protein is enriched in melanosomes, which are the melanin-producing organelles in melanocytes, and plays an essential role in the structural organization of premelanosomes. This protein is involved in generating internal matrix fibers that define the transition from Stage I to Stage II melanosomes. This protein undergoes a complex pattern of posttranslational processing and modification that is essential to the proper functioning of the protein. A secreted form of this protein that is released by proteolytic ectodomain shedding may be used as a melanoma-specific serum marker. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jan 2011]

Function

Plays a central role in the biogenesis of melanosomes. Involved in the maturation of melanosomes from stage I to II. The transition from stage I melanosomes to stage II melanosomes involves an elongation of the vesicle, and the appearance within of distinct fibrillar structures. Release of the soluble form, ME20-S, could protect tumor cells from antibody mediated immunity. [UniProt]

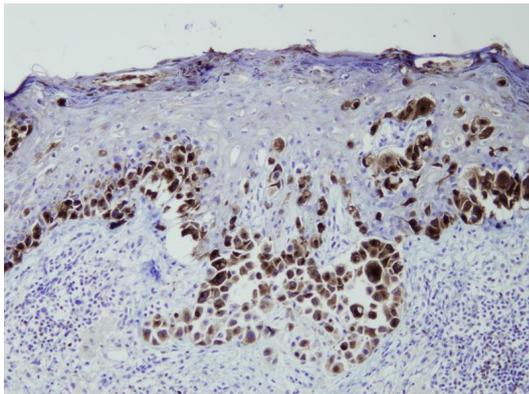
Calculated Mw

70 kDa

PTM

A small amount of P1/P100 (major form) undergoes glycosylation to yield P2/P120 (minor form). P2 is cleaved by a furin-like proprotein convertase (PC) in a pH-dependent manner in a post-Golgi, prelysosomal compartment into two disulfide-linked subunits: a large luminal subunit, M-alpha/ME20-S, and an integral membrane subunit, M-beta. Despite cleavage, only a small fraction of M-alpha is secreted, whereas most M-alpha and M-beta remain associated with each other intracellularly. M-alpha is further processed to M-alpha N and M-alpha C. M-alpha C further undergoes processing to yield M-alpha C1 and M-alpha C3 (M-alpha C2 in the case of PMEL17-is or PMEL17-ls). Formation of intraluminal fibrils in the melanosomes requires the formation of M-alpha that becomes incorporated into the fibrils. Stage II melanosomes harbor only Golgi-modified Pmel17 fragments that are derived from M-alpha and that bear sialylated O-linked oligosaccharides. N-glycosylated. O-glycosylated; contains sialic acid.

Images



ARG10577 anti-Melanoma gp100 antibody [P14-V] IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human cutaneous malignant melanoma (4 μ m section) stained with ARG10577 anti-Melanoma gp100 antibody [P14-V].