abcam

Product datasheet

Recombinant Human Melanoma gp100 protein ab132146

1 References 1 Image

Description

Product name Recombinant Human Melanoma gp100 protein

Expression system Wheat germ

Accession P40967

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence MDLVLKRCLLHLAVIGALLAVGATKVPRNQDWLGVSRQL

RTKAWNRQLYP

EWTEAQRLDCWRGGQVSLKVSNDGPTLIGANASFSIALN

FPGSQKVLPDG

QVIWVNNTIINGSQVWGGQPVYPQETDDACIFPDGGPCPS

GSWSQKRSFV

YVWKTWGQYWQVLGGPVSGLSIGTGRAMLGTHTMEVTVY

HRRGSRSYVPL

AHSSSAFTITDQVPFSVSVSQLRALDGGNKHFLRNQPLTF

ALQLHDPSGY

LAEADLSYTWDFGDSSGTLISRALVVTHTYLEPGPVTAQV

VLQAAIPLTS

CGSSPVPGTTDGHRPTAEAPNTTAGQVPTTEVVGTTPGQ

APTAEPSGTTS

VQVPTTEVISTAPVQMPTAESTGMTPEKVPVSEVMGTTLA

EMSTPEATGM

TPAEVSIVVLSGTTAAQVTTTEWVETTARELPIPEPEGPDA

SSIMSTESI

TGSLGPLLDGTATLRLVKRQVPLDCVLYRYGSFSVTLDIVQ

GIESAEILQ

AVPSGEGDAFELTVSCQGGLPKEACMEISSPGCQPPAQ

RLCQPVLPSPAC

QLVLHQILKGGSGTYCLNVSLADTNSLAVVSTQLIMPGQEA

GLGQVPLIV

GILLVLMAVVLASLIYRRRLMKQDFSVPQLPHSSSHWLRL

PRIFCSCPIG ENSPLLSGQQV

1

Predicted molecular weight 97 kDa including tags

Amino acids 1 to 661

Tags GST tag N-Terminus

Specifications

Our Abpromise quarantee covers the use of ab132146 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

ELISA

Western blot

Form Liquid

Preparation and Storage

Stability and Storage Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.31% Glutathione, 0.79% Tris HCI

General Info

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.

Tissue specificity Preferentially expressed in melanomas. Some expression was found in dysplastic nevi. Not found

in normal tissues nor in carcinomas. Normally expressed at low levels in quiescent adult

melanocytes but overexpressed by proliferating neonatal melanocytes and during tumor growth.

Sequence similarities Belongs to the PMEL/NMB family.

Contains 1 PKD domain.

oligosaccharides.

Domain The RPT domain is essential for the generation of the fibrillar matrix of melanosomes.

The lumenal domain is necessary for correct processing and trafficking to melanosomes.

Post-translational modifications

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 lumenal 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-Is). Formation of intralumenal fibrils in the melanosomes requires the formation of M-alpha that becomes incorporated into the fibrils. Stage II melanosomes harbor only Golgimodified Pmel17 fragments that are derived from M-alpha and that bear sialylated O-linked

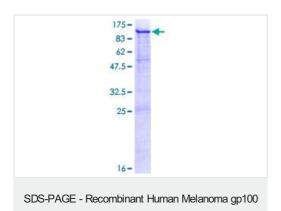
N-glycosylated. O-glycosylated; contains sialic acid.

Cellular localization Secreted and Endoplasmic reticulum membrane. Golgi apparatus. Melanosome. Endosome >

multivesicular body. Identified by mass spectrometry in melanosome fractions from stage I to stage IV. Localizes predominantly to intralumenal vesicles (ILVs) within multivesicular bodies. Associates with ILVs found within the lumen of premelanosomes and melanosomes and particularly in compartments that serve as precursors to the striated stage II premelanosomes.

Images

protein (ab132146)



12.5% SDS-PAGE analysis of ab132146 stained with Coomassie Blue.

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