

## Rabbit Anti-Melanoma gp100 antibody

## SL17478R

Product Name:	Melanoma gp100
Chinese Name:	黑色素瘤相关抗原gp100抗体
Alias:	95 kDa melanocyte specific secreted glycoprotein; 95 kDa melanocyte-specific secreted glycoprotein; D12S53E; gp100; M-beta; ME20; ME20 M/ME20 S; ME20-M; ME20-S; ME20M; ME20M/ME20S; ME20S; Melanocyte lineage specific antigen GP100; Melanocyte protein mel 17; Melanocyte protein Pmel 17 precursor; Melanocytes lineage-specific antigen GP100; Melanoma associated ME20 antigen; Melanoma gp100; Melanoma-associated ME20 antigen; Melanosomal matrix protein 17; Melanosomal matrix protein 17; P1; p100; p26; PMEL 17; PMEL; PMEL_HUMAN; PMEL17; Premelanosome protein; Secreted melanoma-associated ME20 antigen; SI; SIL; SILV; Silver (mouse homolog) like; Silver homolog; Silver locus protein homolog; Silver, mouse, homolog of.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	68kDa
Cellular localization:	Extracellular matrixSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Melanoma gp100:21-120/661
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of

	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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 prosttranslational 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.
	Subcellular Location:  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. Target information above from: UniProt accession P40967 The UniProt Consortium The Universal Protein Resource (UniProt) in 2010 Nucleic Acids Res. 38:D142-D148 (2010).
	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.
	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-ls). Formation of intralumenal 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.

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

### Similarity:

Belongs to the PMEL/NMB family.

Contains 1 PKD domain.

# SWISS: P40967

**Gene ID:** 6490

#### Database links:

Entrez Gene: 6490 Human

Entrez Gene: 20431 Mouse

Entrez Gene: 594851 Pig

Entrez Gene: 362818 Rat

Omim: 155550 Human

SwissProt: Q06154 Cow

SwissProt: P40967 Human

SwissProt: Q60696 Mouse

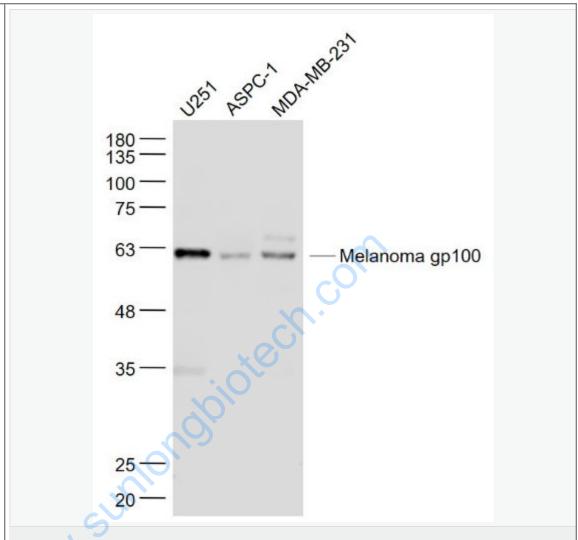
Unigene: 95972 Human

Unigene: 16756 Mouse

Unigene: 162910 Rat

### Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Sample:

U251(Human) Cell Lysate at 30 ug

ASPC-1(Human) Cell Lysate at 30 ug

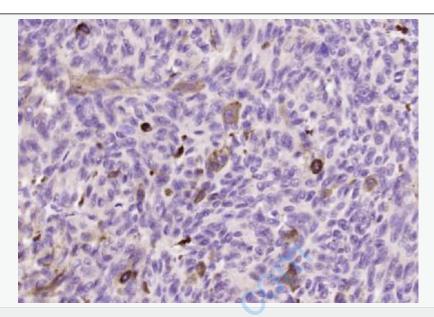
MDA-MB-231(Human) Cell Lysate at 30 ug

Primary: Anti- Melanoma gp100 (SL17478R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 68 kD

Observed band size: 62 kD



Paraformaldehyde-fixed, paraffin embedded (Human melanoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Melanoma gp100) Polyclonal Antibody, Unconjugated (SL17478R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.