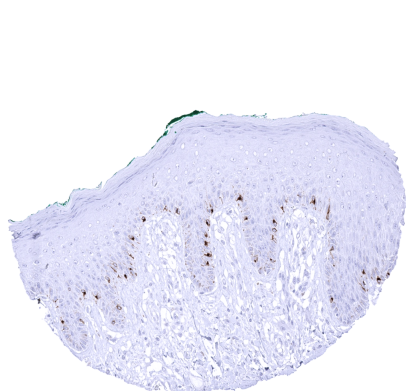


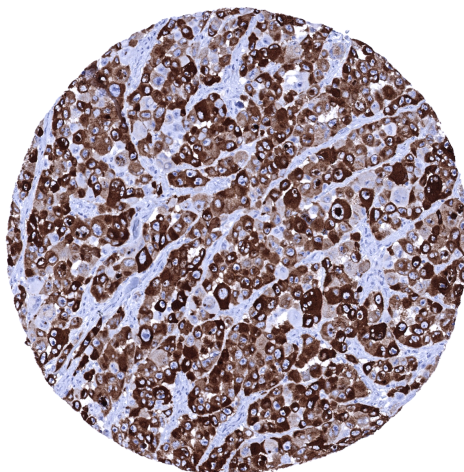
## Anti-PMEL/gp100/Melanosome Antibody MSVA-617R / Recombinant Rabbit monoclonal

Human SwissProt	P40967
Human Gene Symbol	SILV
Synonyms	95kDa melanocyte-specific secreted glycoprotein, M-beta, Melanocyte lineage specific antigen GP100, Melanocyte protein Pmel 17, Melanoma associated ME20 antigen, Melanosomal matrix protein17, p100, p26, PMEL17, Premelanosome protein, Secreted melanoma-associated ME20 antigen, SILV, Silver homolog
Specificity	PMEL
Immunogen	Recombinant fragment of human SILV protein
Isotype	Rabbit / IgG
Species Reactivity	Human

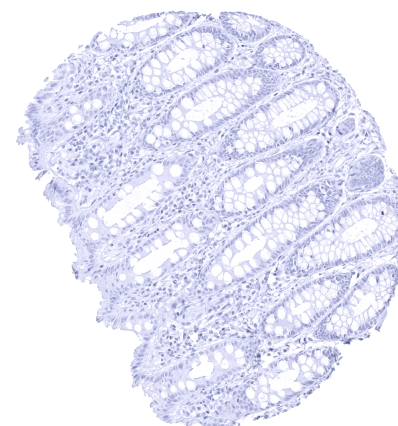
Localization	Cytoplasmic
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Positive Control	Skin: A moderate to strong cytoplasmic PMEL immunostaining should be seen in all melanocytes of the skin.
Negative Control	Colon: PMEL immunostaining should be completely absent in all cells.



Strong PMEL immunostaining in melanocytes of the skin.



Strong cytoplasmic PMEL immunostaining in all cells of a malignant melanoma of the skin.



Rectum, mucosa

### Biology

Premelanosome protein (PMEL), also termed gp100 is a 100 kDa glycoprotein that is encoded by the PMEL gene at 12q13.2. PMEL is a pigment cell-specific protein responsible for the formation of fibrillar sheets within the pigment organelle, termed melanosome. The fibrillar sheets function as a template upon which melanins polymerize as they are synthesized. The PMEL fibrils are needed for optimal pigment cell function, as animals that either lack PMEL protein or express deficient (mutant) PMEL variants show varying extents of hypopigmentation and pigment cell impairment. The expression of the PMEL gene is regulated by the microphthalmia-associated transcription factor (MITF). The PMEL protein is a therapeutic target used in melanoma patients for vaccination and other treatment modalities. Among normal adult tissues a cytoplasmic PMEL immunostaining is seen in melanocytes of the skin. Among tumors, a positive PMEL immunostaining is seen in the majority of malignant melanomas. In benign melanocytic naevus, the epidermal part may be strongly stained while the dermal part is weakly stained or negative. PMEL is also seen in most cases of blue naevus, cellular blue naevus, dysplastic naevus, and Spitz naevus. PMEL also occurs in various other neoplasms of melanocytic origin or differentiation, such as for example PEComas derived from modified smooth muscle cells in the tuberous sclerosis complex (angiomyolipoma, lymphangioleiomyoma(-tosis), pulmonary sugar tumor, cardiac rhabdomyoma).

### Potential Research Applications

-PMEL is a promising therapeutic target used by various treatment modalities. Its therapeutic potential is still under investigation.

-PMEL expression is not detected in all malignant melanomas and the expression levels vary between individual tumors. The prognostic/clinical impact of PMEL expression levels is unclear in melanomas and should be investigated.

### Protocol Suggestions

**Dilution: 1:100 ; pH7,8 is optimal.**

Freshly cut sections should be used (less than 10 days between cutting and staining).

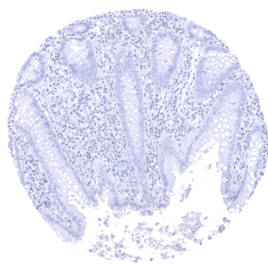
### Limitations

This antibody is available for **research use only** and is not approved for use in diagnostics.

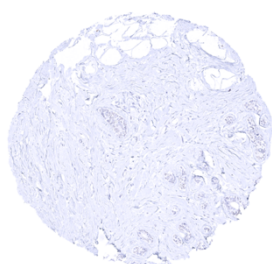
Not for resale without express authorization.

### Warranty

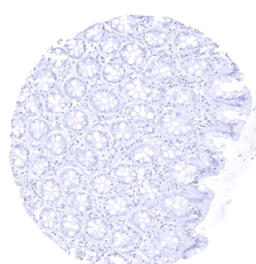
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



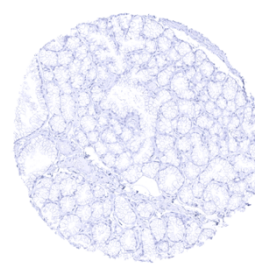
Appendix, mucosa



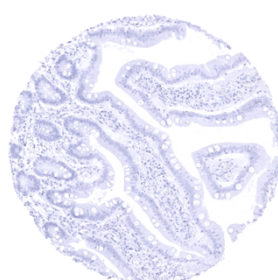
Breast



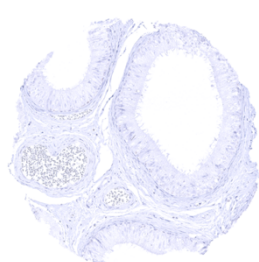
Colon descendens, mucosa



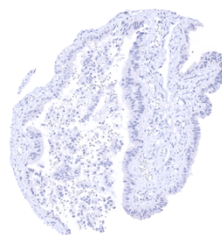
Duodenum, Brunner gland



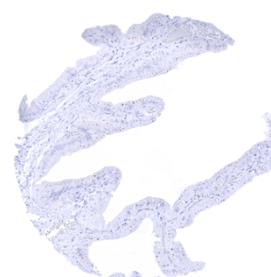
Duodenum, mucosa



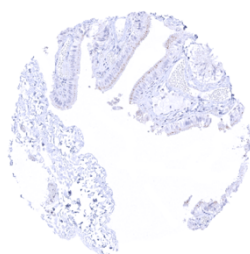
Epididymis



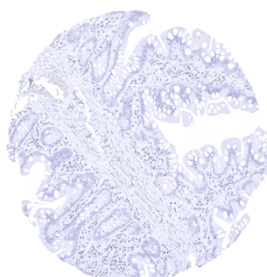
Fallopian tube, mucosa



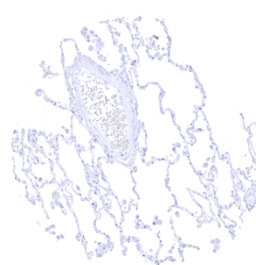
Gallbladder, epithelium - A faint cytoplasmic granular apical PMEL immunostaining can be found in gallbladder epithelium (tolerable antibody cross-reactivity)



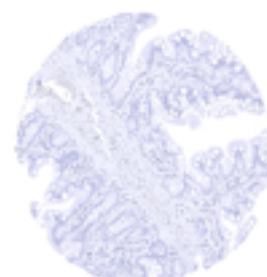
Gallbladder, epithelium - A faint cytoplasmic granular apical PMEL immunostaining can be seen in gallbladder epithelium (tolerable antibody cross-reactivity)



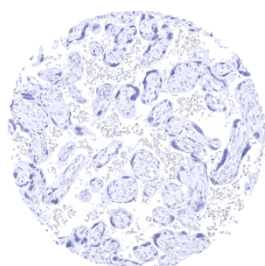
Ileum, mucosa



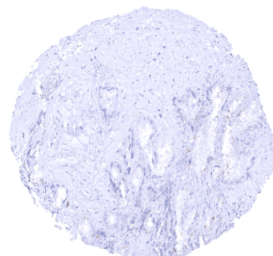
Lung



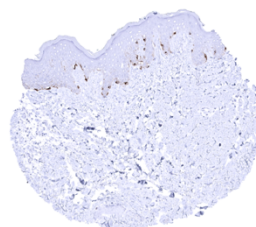
Placenta (amnion)



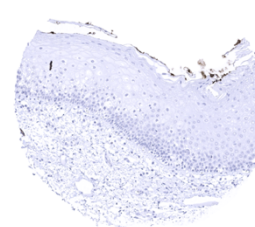
Placenta, mature



Seminal vesicle



Skin



Tonsil, surface epithelium