

# Recombinant *human* Mart1



Catalog M002  
Lot 022  
product specification sheet: PS-M002

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## Product description

The expression of Mart1 is restricted to the retina, melanomas and melanocyte cell lines. It is involved in melanosome biogenesis by ensuring the stability of GPR143 and plays a vital role in the expression, stability, trafficking, and processing of melanocyte protein PMEL, which is critical to the formation of stage II melanosomes. Intracellular it is found in small vesicles and tubules dispersed over the entire cytoplasm. A small fraction of the protein is inserted into the membrane in an inverted orientation. Inversion of membrane topology results in the relocalization of the protein from a predominant Golgi/post-Golgi area to the endoplasmic reticulum. Melanoma cells expressing the protein with an inverted membrane topology are more effectively recognized by specific cytolytic T-lymphocytes than those expressing the protein in its native membrane orientation.

Reference sequences:	NC_005511 NP_005502 Swiss-prot Q16655
Alternative names:	melanoma antigen recognized by T-cells 1 Mart1 MLANA Melan A
Gene ID:	2315

Residues 1-118 of *human* Mart1 were cloned, the protein was over-expressed in HEK293 and was purified to homogeneity. The calculated molecular weight of recombinant Mart1 is 18.6 kDa (including purification tag). The protein contains a C-terminal (TEV-Strep)-tag. Each vial contains 100 µg Mart1 at a concentration of 0.44 mg/ml.

## Storage and stability

Mart1 should be stored at - 80 °C (stable for at least 1 year). The buffer contains 20 HEPES, 150 mM NaCl, 0.05% DDM, 1 mM DTT, pH 7.4 without preservative. After thawing it should be stored in appropriate small aliquots at - 20 °C or - 80 °C (stable for at least 2 months).

## Sequence

mpredahfygypkkgghghsytaelagiltvilgvllligcwycrrrnyralmdkshlvgvtqcaltrrcpqegfdhrdskvslqekncepvvpnapayeklsaeqsppp  
yspaaaenlyfqgaawshpqfekgaawshpqfekgaawshpqfekgaa\*  
purification tag in red.

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