

DESCRIPTION

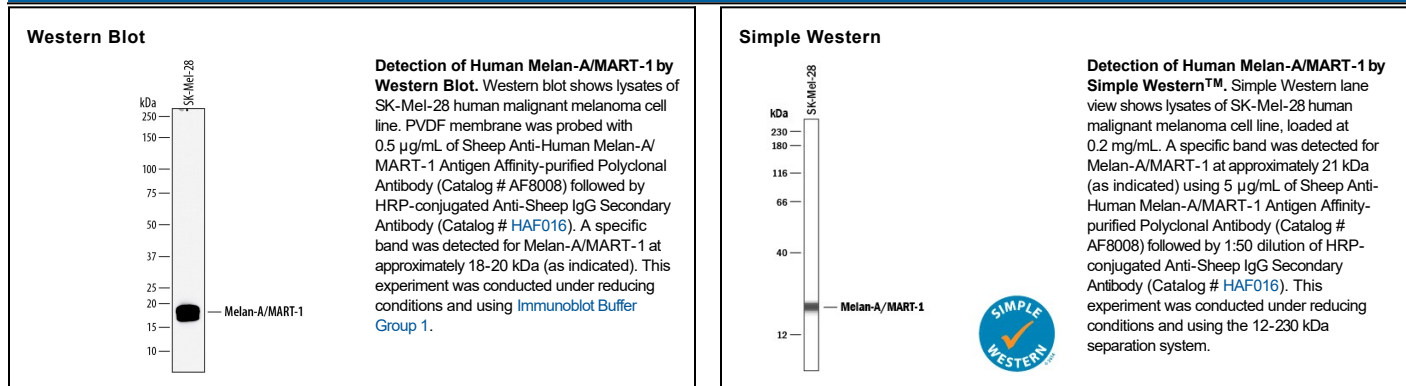
Species Reactivity	Human
Specificity	Detects human Melan-A/MART-1 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Melan-A/MART-1 Asn52-Pro118 Accession # Q16655
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.5 µg/mL	See Below
Simple Western	5 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Melan-A (MeLANoma-A; also MART-1, LB39-AA and SK29-AA, MLANA) is a 18-24 kDa member of a melanocyte lineage-specific, generally structurally-unrelated family of proteins. It is expressed only in melanocytes, retinal pigment epithelium and melanoma cells. Melan-A is involved in melanosome formation, and appears to stabilize both GPCR143/OA-1 and PMEL, thus ensuring the formation of a stage 2 (melanin production within a fibrillar matrix) melanosome. It is typically found in the Golgi, and upon inversion of its topology, becomes embedded in the ER. It may also appear in endosomes and on the cell surface where, in theory, it is recognizable by a special naïve type of CD8⁺ T cell that is derived from the thymus. Notably, these cells normally appear to be unresponsive, even in the face of exposure to skin melanocytes during wound healing. Human MLANA is a 118 amino acid (aa) type III (no signal sequence) transmembrane protein. It contains a 26 aa extracellular region (aa 1-26), and a 71 aa cytoplasmic domain (aa 48-118). There is one utilized phosphorylation site at Ser108, and the molecule is known to undergo acylation, creating a MW of 23-34 kDa in SDS-PAGE. Over aa 52-118, human Melan-A shares 62% aa sequence identity with mouse MLANA.