

DESCRIPTION

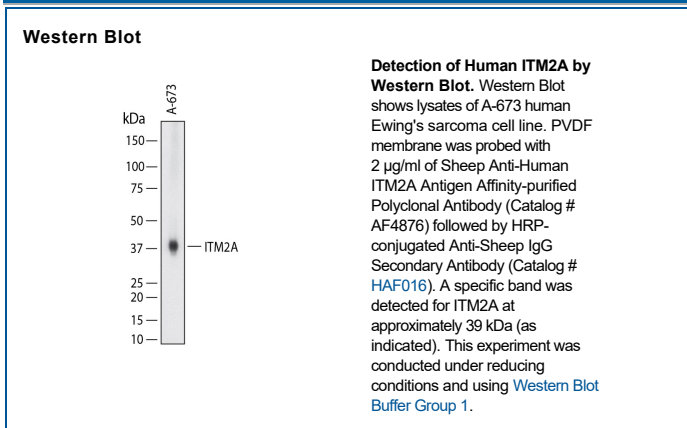
Species Reactivity	Human
Specificity	Detects human ITM2A in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant human (rh) ITM2B is observed, and less than 1% cross-reactivity with rhITM2C is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human ITM2A Pro80-Glu263 Accession # O43736
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	2 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS. For liquid material, refer to CoA for concentration.
Shipping	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
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

ITM2A (Integral membrane protein 2A; also protein E25) is a 43-45 kDa member of the ITM2 family of proteins. It is expressed by chondrocytes involved in endochondral ossification, skeletal muscle, adipose tissue-derived stem cells, and CD3-activated CD4⁺ and CD8⁺ T cells. ITM2A is found embedded in both plasma membrane and Golgi complex. Human ITM2A is a 263 amino acid (aa) type II transmembrane glycoprotein. The ECD (aa 75-263) contains one BRICHOS domain (aa 133-227). Proteolytic cleavage by furin is typical for BRICHOS domain-containing proteins. ITM2A may exist as a dimer. There are two potential splice variants, one that shows a deletion of aa 55-81, and a second that shows a deletion of aa 38-81. Full-length human ITM2A shares 95% aa identity with mouse ITM2A.