bio-techne[®] RDSYSTEMS

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF4876

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

Western Blot	
kDa 150- 100- 75- 50- 37- 25- 15- 10-	Britows instates of A-673 number Ewing's sarcoma cell line. PVDF membrane was probed with 2 µg/ml of Sheep Anti-Human ITM2A Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4876) followed by HRP- conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for ITM2A at approximately 39 kDa (as indicated). This experiment was conditions and using Western Blot Buffer Group 1.
PREPARATION AND	
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.

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Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
	 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 endochondrial 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.

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