

Human SH2D2A Antibody

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF6020

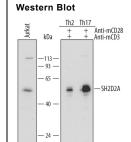
DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human SH2D2A in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	E. coli-derived recombinant human SH2D2A Ile279-Gln389 Accession # Q9NP31
Formulation	Lyophilized from a 0.2 µm filtered 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	1 μg/mL	See Below
Simple Western	10 μg/mL	See Below

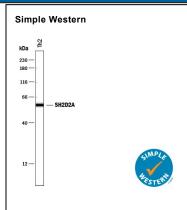
DATA



Western blot shows lysates of Jurkat human acute T cell leukemia cell line (untreated), human primary differentiated Th2 cells and human primary differentiated Th17 cells treated (+) with 1 µg/mL Hamster Anti-Mouse CD3ε Monoclonal Antibody (Catalog # MAB484) and 5 µg/mL Rat Anti-Mouse CD28 Monoclonal Antibody (Catalog # MAB4831) for 120 minutes. PVDF membrane was probed

Detection of Human SH2D2A by Western Blot.

MAB4831) for 120 minutes. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human SH2D2A Polyclonal Antibody (Catalog # AF6020) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for SH2D2A at approximately 52 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.



Detection of Human SH2D2A by Simple WesternTM. Simple Western lane view shows lysate of human primary differentiated Th2 cells loaded at 0.2 mg/mL. A specific band was detected for SH2D2A at approximately 58 kDa (as indicated) using 10 µg/mL of Sheep Anti-Human SH2D2A Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6020) followed by 1:50 dillution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE		
Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.	
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.	
	 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

SH2D2A (SH2 domain-containing protein 2A; also TSAd and VRAP) is a 52 kDa protein best described as a multifunctional intracellular adaptor molecule. It is expressed in activated CD4⁺ and CD8⁺ T cells, endothelial cells, and fibroblasts. SH2D2A is found in both cytoplasm and nucleus, and has multiple binding partners. After TCR activation, SH2D2A interacts with LCK, prolonging its activity. It also binds to SMAD2 and SMAD3, and constitutively interacts with PI3K and PLCγ, thus participating in VEGF:KDR signaling. Human SH2D2A is 389 amino acids (aa) in length and contains one SH2 domain (aa 95-186) and a Pro-rich region (aa 187-389). Phosphorylation occurs on Y39, Y216 and Y305, and on S217 and S296.

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