

## DESCRIPTION

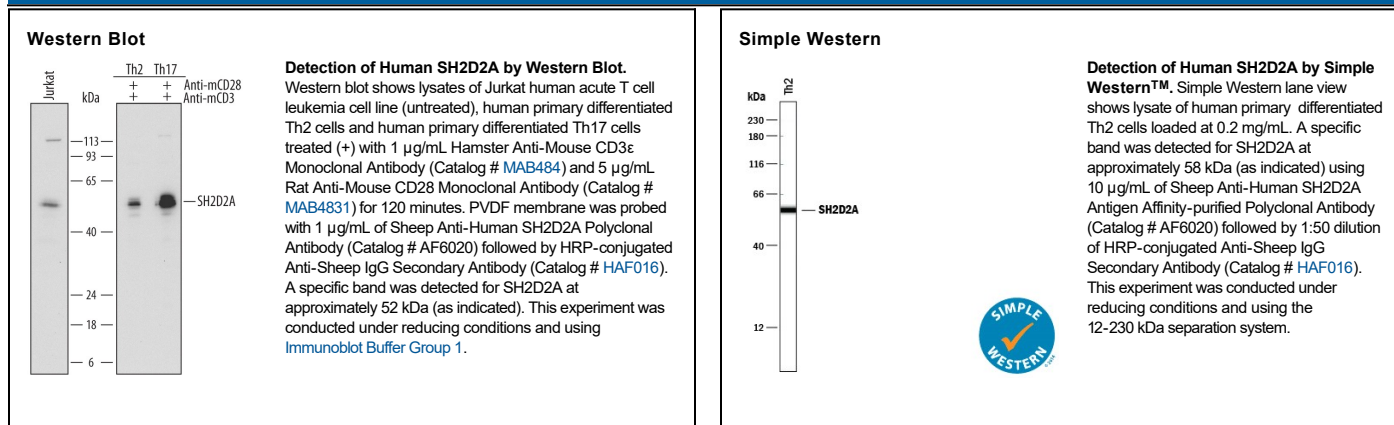
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human SH2D2A in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human SH2D2A Ile279-Gln389 Accession # Q9NP31
<b>Formulation</b>	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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below
<b>Simple Western</b>	10 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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<sup>+</sup> and CD8<sup>+</sup> 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.