

DESCRIPTION

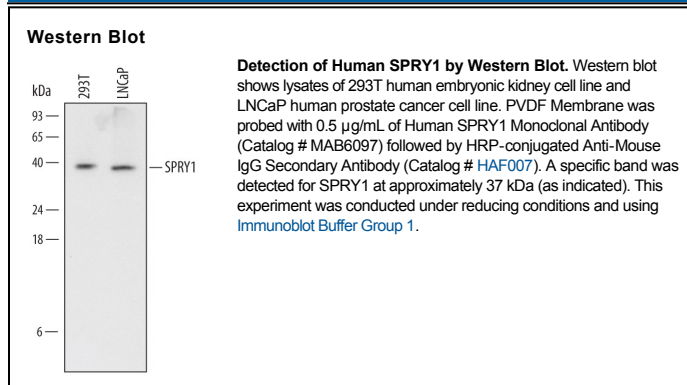
Species Reactivity	Human
Specificity	Detects human SPRY1 in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human SPRY2, 3, or 4 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 669534
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E.coli</i> -derived recombinant human SPRY1 Met1-Lys178 Accession # O43609
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 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

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 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

SPRY1 (sprouty homolog 1) is a 34-38 kDa member of the sprouty family of proteins. It is widely expressed, being found in multiple embryonic and adult tissues. SPRY1 is considered a negative regulator of cellular signaling. In particular, it appears to both inhibit MAP kinase signaling following RTK activation, and block TCR signaling following antigen activation. It interacts with a number of molecules, including PLC-γ1, LAT, CBL, caveolin-1 and SPRY2. Human SPRY1 is 319 amino acids (aa) in length. It contains one CBL-TKB binding site (aa 51-57) that is phosphorylated at Tyr53, a Ser-rich region (aa 112-131), and a Cys-rich domain (aa 181-306) that mediates intracellular translocation. SPRY1 undergoes serine phosphorylation, ubiquitination and palmitoylation, the latter which induces SPRY1 to associate with cell membranes. Over aa 1-178, human SPRY1 shares 76% aa identity with mouse SPRY1.