

DESCRIPTION

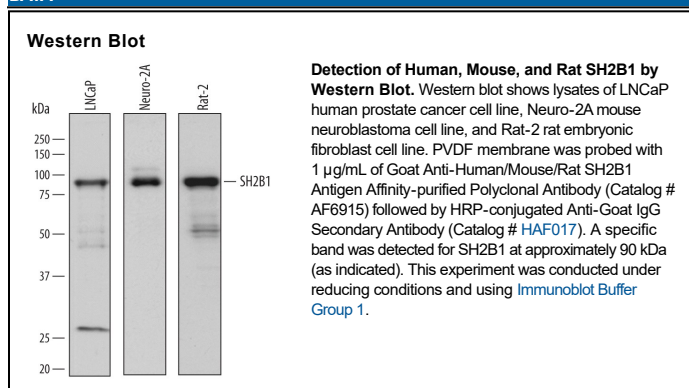
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat SH2B1 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human SH2B1 Pro317-Leu467 Accession # Q9NRF2
Formulation	Lyophilized from a 0.2 µm filtered 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

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 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

SH2B1 (Src-Homology 2 Domain-Containing protein B1/1B; also SH2B1α, PSM and SH2B adaptor protein 1) is a member of the SH2B adaptor family of proteins. Although its predicted MW is 80 kDa, it runs anomalously at 90-102 kDa in SDS-Page. SH2B1 is a nucleocytoplasmic protein that is widely expressed in cells such as skeletal muscle cells, neurons, and adipocytes. It serves as a linker between Jak2 and multiple downstream molecules such as Rac and IRS1. It does this following phosphorylation on a number of potential sites. It also promotes the enzymatic activity of associated receptor kinases, thus potentiating ligand-receptor interactions. SH2B1 appears to bind to nonphosphorylated Jaks as a monomer, while Jak phosphorylation induces SH2B1 dimerization. SH2B1 is further reported to form a homopentamer, and to oligomerize with SH2B2. Human SH2B1(α) is 756 amino acids (aa) in length. It contains one dimerization segment (aa 24-85), an NLS (aa 224-233), one pleckstrin homology region (aa 249-378) and an SH2 domain (aa 521-625). At least three utilized phosphorylation sites exist. There are at least two splice variants for SH2B1. The 90-92 kDa SH2B1β isoform shows a 39 aa substitution for aa 633-756, while the SH2B1γ isoform possesses a 50 aa substitution for the same aa range (i.e., aa 633-756). Over aa 317-467, human SH2B1 shares 92% aa identity with mouse SH2B1.