

**SH2B1 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP16002b****Specification**

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**SH2B1 Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O9NRF2</a>
Other Accession	<a href="#">O62985</a> , <a href="#">O91ZM2</a> , <a href="#">NP_001139284.1</a> , <a href="#">NP_001139267.1</a>
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	725-752

**SH2B1 Antibody (C-term) - Additional Information****Gene ID** 25970**Other Names**

SH2B adapter protein 1, Pro-rich, PH and SH2 domain-containing signaling mediator, PSM, SH2 domain-containing protein 1B, SH2B1, KIAA1299, SH2B

**Target/Specificity**

This SH2B1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 725-752 amino acids from the C-terminal region of human SH2B1.

**Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

SH2B1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**SH2B1 Antibody (C-term) - Protein Information****Name** SH2B1

**Synonyms** KIAA1299, SH2B

**Function** Adapter protein for several members of the tyrosine kinase receptor family. Involved in multiple signaling pathways mediated by Janus kinase (JAK) and receptor tyrosine kinases, including the receptors of insulin (INS), insulin-like growth factor 1 (IGF1), nerve growth factor (NGF), brain-derived neurotrophic factor (BDNF), glial cell line-derived neurotrophic factor (GDNF), platelet-derived growth factor (PDGF) and fibroblast growth factors (FGFs). In growth hormone (GH) signaling, autophosphorylated ('Tyr-813') JAK2 recruits SH2B1, which in turn is phosphorylated by JAK2 on tyrosine residues. These phosphotyrosines form potential binding sites for other signaling proteins. GH also promotes serine/threonine phosphorylation of SH2B1 and these phosphorylated residues may serve to recruit other proteins to the GHR-JAK2-SH2B1 complexes, such as RAC1. In leptin (LEP) signaling, binds to and potentiates the activation of JAK2 by globally enhancing downstream pathways. In response to leptin, binds simultaneously to both, JAK2 and IRS1 or IRS2, thus mediating formation of a complex of JAK2, SH2B1 and IRS1 or IRS2. Mediates tyrosine phosphorylation of IRS1 and IRS2, resulting in activation of the PI 3- kinase pathway. Acts as a positive regulator of NGF-mediated activation of the Akt/Forkhead pathway; prolongs NGF-induced phosphorylation of AKT1 on 'Ser-473' and AKT1 enzymatic activity. Enhances the kinase activity of the cytokine receptor-associated tyrosine kinase JAK2 and of other receptor tyrosine kinases, such as FGFR3 and NTRK1. For JAK2, the mechanism seems to involve dimerization of both, SH2B1 and JAK2. Enhances RET phosphorylation and kinase activity. Isoforms seem to be differentially involved in IGF1 and PDGF-induced mitogenesis (By similarity).

**Cellular Location**

Cytoplasm. Membrane. Nucleus. Note=Shuttles between the nucleus and the cytoplasm.

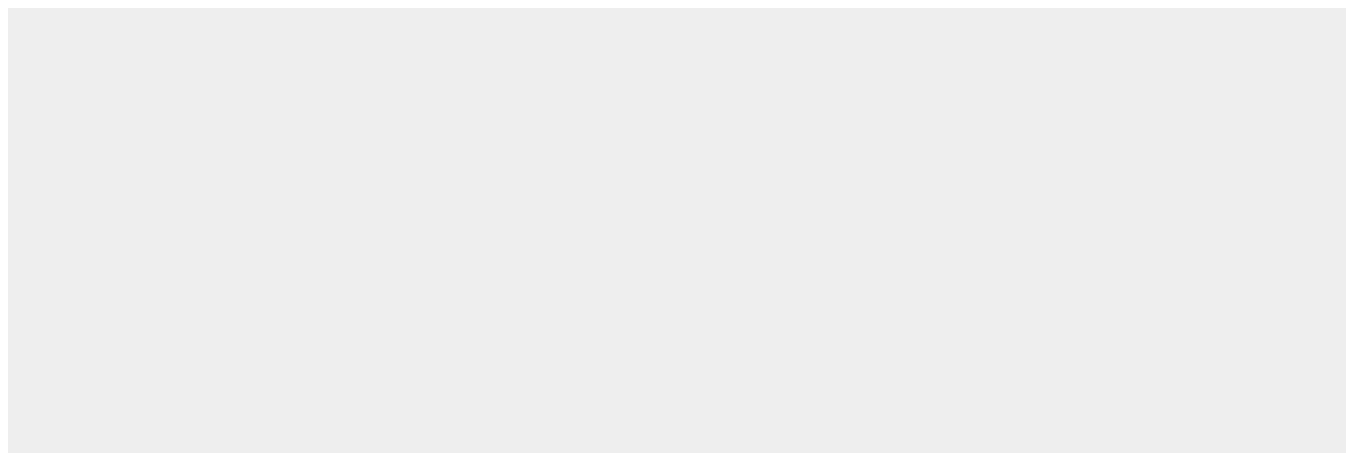
**Tissue Location**

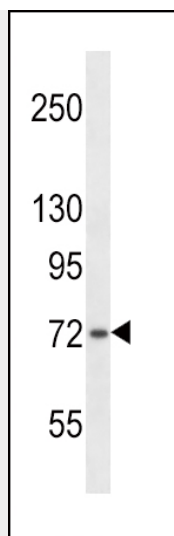
Widely expressed with highest levels in skeletal muscle and ovary.

**SH2B1 Antibody (C-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**SH2B1 Antibody (C-term) - Images**



SH2B1 Antibody (C-term) (Cat. #AP16002b) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the SH2B1 antibody detected the SH2B1 protein (arrow).

#### **SH2B1 Antibody (C-term) - Background**

This gene encodes a member of the SH2-domain containing mediators family. The encoded protein mediates activation of various kinases and may function in cytokine and growth factor receptor signaling and cellular transformation. Alternatively spliced transcript variants have been described. [provided by RefSeq].

#### **SH2B1 Antibody (C-term) - References**

Fontaine-Bisson, B., et al. Diabetologia 53(10):2155-2162(2010)  
Holzapfel, C., et al. Int J Obes (Lond) 34(10):1538-1545(2010)  
Shi, J., et al. Am. J. Epidemiol. 172(3):244-254(2010)  
Haupt, A., et al. Obesity (Silver Spring) 18(6):1212-1217(2010)  
Ng, M.C., et al. J. Clin. Endocrinol. Metab. 95(5):2418-2425(2010)