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APS Rabbit pAb

Catalog # AP98173

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	O14492
Other Accession	O14492
Predicted	Rat, Pig, Human, Mouse, Rabbit, Chicken, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	67738
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human APS
Epitope Specificity	401-500/632
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the SH2B adapter family.Contains 1 PH domain.Contains 1 SH2 domain.
SUBUNIT	Homodimer. Interacts with KIT/c-KIT, SHC1, EPOR, PDGFR, VAV1 and VAV3. Interacts (via N-terminal region) with SHC1. Interacts (via the phosphorylated C-terminus) with GRB2. Interacts (via its SH2 domain) with EPOR, INSR and KIT. Interacts with GRB2 after B-cell antigen receptor stimulation. Interacts (via PH domain) with VAV3. Interacts with NTRK1, NTRK2 and NTRK3 (phosphorylated); after stimulation of the receptor by its extracellular ligand and subsequent autophosphorylation of the receptor. Binds INSR, GRB2, ASB6 and CAP. Insulin stimulation leads to dissociation of CAP. Binds CBS only when SH2B2/APS has become phosphorylated. INSR binding does not depend on the phosphorylation of SH2B2/APS.
Post-translational modifications	Tyrosine phosphorylated by JAK2, KIT and other kinases activated by B-cell receptor in response to stimulation with cytokines, IL3, IL5, PDGF, IGF1, IGF2, CSF2/GM-CSF and cross-linking of the B-cell receptor complex.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The protein encoded by this gene is expressed in B lymphocytes and contains pleckstrin homology and src homology 2 (SH2) domains. In Burkitt's lymphoma cell lines, it is tyrosine-phosphorylated in response to B cell receptor stimulation. Because it binds Shc independent of stimulation and Grb2 after stimulation, it appears to play a role in signal transduction from the receptor to the Shc/Grb2 pathway. [provided by RefSeq, Jun 2009]

Additional Information

Gene ID	10603
Other Names	APS; SH2B2_HUMAN; SH2B2; Adapter protein with pleckstrin homology and Src homology 2 domains; SH2 and PH domain-containing adapter protein

	APS; SH2B adaptor protein 2; adaptor protein with pleckstrin homology and src
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	SH2B2
Synonyms	APS
Function	Adapter protein for several members of the tyrosine kinase receptor family. Involved in multiple signaling pathways. May be involved in coupling from immunoreceptor to Ras signaling. Acts as a negative regulator of cytokine signaling in collaboration with CBL. Binds to EPOR and suppresses EPO-induced STAT5 activation, possibly through a masking effect on STAT5 docking sites in EPOR. Suppresses PDGF-induced mitogenesis. May induce cytoskeletal reorganization via interaction with VAV3.
Cellular Location	Cytoplasm. Cell membrane. Note=Cytoplasmic before PDGF stimulation. After PDGF stimulation, localized at the cell membrane and peripheral region
Tissue Location	Expressed in spleen, prostate, testis, uterus, small intestine and skeletal muscle. Among hematopoietic cell lines, expressed exclusively in B-cells. Not expressed in most tumor cell lines.

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