

Rabbit Anti-BAIAP2 antibody

SL0242R

Product Name:	BAIAP2
Chinese Name:	胰岛素受体底物p53蛋白抗体
Alias:	Insulin receptor substrate P53; IRSp53; IRS P53; IRS-P53; Baiap2; BAI1 associated protein 2 isoform 3; Brain-specific angiogenesis inhibitor 1-associated protein 2; BAI1-associated protein 2; Insulin receptor tyrosine kinase substrate protein p53; Insulin receptor substrate p53; Insulin receptor substrate protein of 53 kDa; IRSp53; BAIP2_HUMAN; BAI-associated protein 2; BAI1-associated protein 2; Protein BAP2; Fas ligand-associated factor 3; Insulin receptor substrate p53/p58; Insulin receptor substrate protein of 53 kDa; FLAF3; IRS-58; IRSp53/58.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100- 500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	6lkDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human IRS P53:151-250/552
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	The protein encoded by this gene has been identified as a brain-specific angiogenesis

inhibitor (BAI1)-binding protein. This interaction at the cytoplasmic membrane is crucial to the function of this protein, which may be involved in neuronal growth-cone guidance. This protein functions as an insulin receptor tyrosine kinase substrate and suggests a role for insulin in the central nervous system. This protein has also been identified as interacting with the dentatorubral-pallidoluysian atrophy gene, which is associated with an autosomal dominant neurodegenerative disease. It also associates with a downstream effector of Rho small G proteins, which is associated with the formation of stress fibers and cytokinesis. Alternative splicing of the end of this gene results in three products of undetermined function.

Function:

Adapter protein that links membrane-bound small G-proteins to cytoplasmic effector proteins. Necessary for CDC42-mediated reorganization of the actin cytoskeleton and for RAC1-mediated membrane ruffling. Involved in the regulation of the actin cytoskeleton by WASF family members and the Arp2/3 complex. Plays a role in neurite growth. Acts syngeristically with ENAH to promote filipodia formation.

Subunit:

Homodimer. Interacts with CDC42 and RAC1 that have been activated by GTP binding. Interacts with ATN1, BAI1, EPS8, SHANK1, SHANK2, SHANK3, WASF1 and WASF2. Interacts with ENAH after recruitment of CDC42. Interacts with TIAM1 and DIAPH1. Interacts (via SH3 domain) with E.coli effector protein EspF(U) (via PXXP motifs). Interacts with E.coli intimin receptor Tir.

Subcellular Location:

Cell Membrane and Cytoplasmic.

Tissue Specificity:

Isoform 1 and isoform 4 are expressed almost exclusively in brain. Isoform 4 is barely detectable in placenta, prostate and testis. A short isoform is ubiquitous, with the highest expression in liver, prostate, testis and placenta.

Post-translational modifications:

Phosphorylated on tyrosine residues by INSR in response to insulin treatment.

Similarity:

Contains 1 IMD (IRSp53/MIM homology) domain. Contains 1 SH3 domain.

SWISS: Q9UQB8

Gene ID: 10458

Database links:

Entrez Gene: 10458 Human

Entrez Gene: 108100 Mouse

Entrez Gene: 117542 Rat

<u>Omim: 605475</u> Human

SwissProt: Q9UQB8 Human

SwissProt: Q8BKX1 Mouse

SwissProt: Q6GMN2 Rat

Unigene: 128316 Human

Unigene: 197534 Mouse

Unigene: 95155 Rat

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