

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.
Research Area	Cell biology Neurobiology Apoptosis The cell membrane 受体 Diabetes Endocrinopathy
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human, Mouse, Rat,
Applications	WB=1:500-2000 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	61kDa
Cellular localization	cytoplasmic The cell membrane
Form	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
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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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 synergetically with ENAH to promote filipodia formation.

Product Detail

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

[Omim: 605475](#) Human

[SwissProt: Q9UQB8](#) Human

[SwissProt: Q8BKX1](#) Mouse

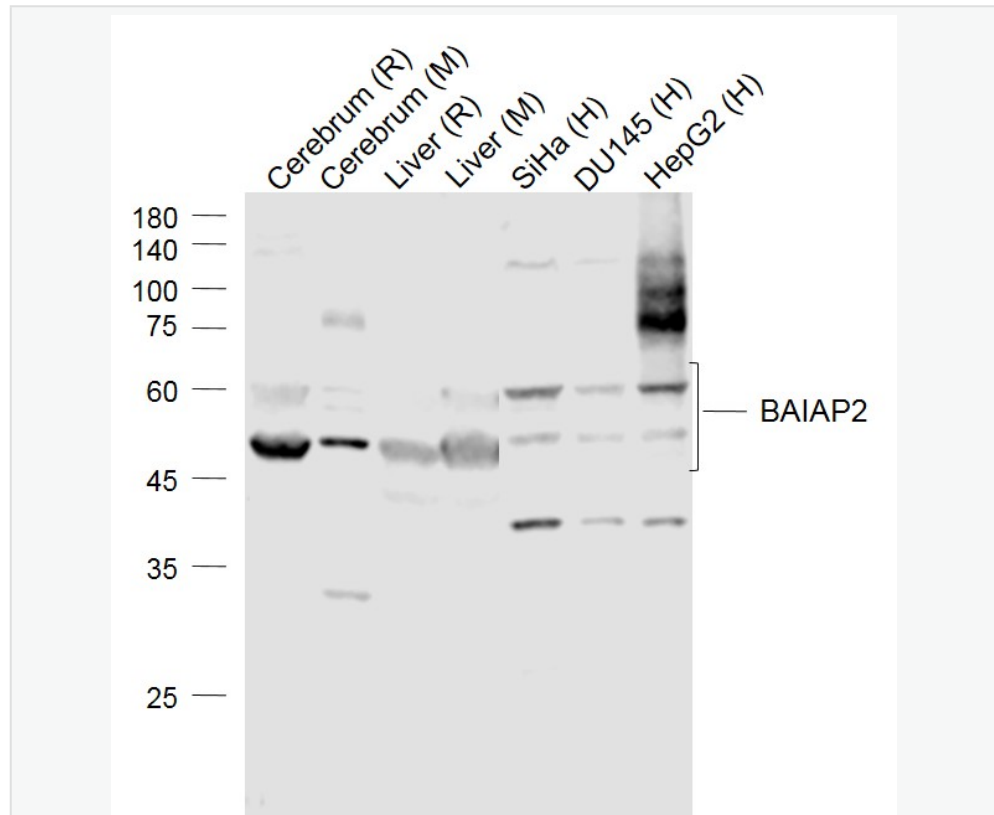
[SwissProt: Q6GMN2](#) Rat

[Unigene: 128316](#) Human

[Unigene: 197534](#) Mouse

[Unigene: 95155](#) Rat

Product Picture



Sample:

Lane 1: Cerebrum (Rat) Lysate at 40 ug

Lane 2: Cerebrum (Mouse) Lysate at 40 ug

Lane 3: Liver (Rat) Lysate at 40 ug

Lane 4: Liver (Mouse) Lysate at 40 ug

Lane 5: SiHa (Human) Cell Lysate at 30 ug

Lane 6: DU145 (Human) Cell Lysate at 30 ug

Lane 7: HepG2 (Human) Cell Lysate at 30 ug

Primary: Anti-BAIAP2 (SL0242R) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution



Predicted band size: 58'53 kD

Observed band size: 58'53 kD