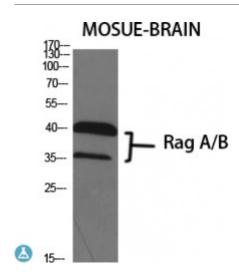


## Anti-Rag A/B antibody



**Description** Rabbit polyclonal to Rag A/B.

Model STJ95355

**Host** Rabbit

**Reactivity** Human, Mouse, Rat

**Applications** ELISA, IHC, WB

Immunogen Synthesized peptide derived from human Rag A/B

**Immunogen Region** 240-320 aa, C-terminal

**Gene ID** <u>10670</u>

Gene Symbol RRAGA

**Dilution range** WB 1:500-1:2000IHC 1:100-1:300ELISA 1:20000

**Specificity** Rag A/B Polyclonal Antibody detects endogenous levels of Rag A/B protein.

**Tissue Specificity** Ubiquitously expressed with highest levels of expression in skeletal muscle,

heart, and brain.

**Purification** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Note** For Research Use Only (RUO).

Protein Name Ras-related GTP-binding protein A Rag A RagA Adenovirus E3 14.7 kDa-

interacting protein 1 FIP-1

Molecular Weight 34 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Concentration** 1 mg/ml

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:16963OMIM:612194</u>

Alternative Names Ras-related GTP-binding protein A Rag A RagA Adenovirus E3 14.7 kDa-

interacting protein 1 FIP-1

**Function** Guanine nucleotide-binding protein that plays a crucial role in the cellular

response to amino acid availability through regulation of the mTORC1 signaling cascade. Forms heterodimeric Rag complexes with RRAGC or RRAGD and cycles between an inactive GDP-bound and an active GTP-bound form. In its active form participates in the relocalization of mTORC1 to the lysosomes and its subsequent activation by the GTPase RHEB. Involved in the RCC1/Ran-GTPase pathway. May play a direct role in a TNF-alpha signaling pathway leading to induction of cell death. May alternatively act as a cellular target for adenovirus E3-14.7K, an inhibitor of TNF-alpha functions,

thereby affecting cell death.

Cellular Localization Cytoplasm Nucleus Lysosome. Predominantly cytoplasmic. May shuttle

between the cytoplasm and nucleus, depending on the bound nucleotide state. Colocalizes in vivo with adenovirus E3-14.7K mainly to the cytoplasm especially near the nuclear membrane and in discrete foci on or near the

plasma membrane.

**Post-translational** Ubiquitinated. 'Lys-68'-linked polyubiquitination of the GDP-bound inactive

form of RRAGA by RNF152 is increased in response to amino acid starvation. Polyubiquitination promotes interaction with the GATOR1

complex. This does not affect RRAGA degradation.

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**Modifications** 

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