

**RRAGA + RRAGB Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP54302****Specification**

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**RRAGA + RRAGB Polyclonal Antibody - Product Information**

Application	IHC-P
Primary Accession	<a href="#">O7L523</a>
Reactivity	Rat, Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36566

**RRAGA + RRAGB Polyclonal Antibody - Additional Information****Gene ID** 10670**Other Names**

Ras-related GTP-binding protein A, Rag A, RagA, 3.6.5.-, Adenovirus E3 14.7 kDa-interacting protein 1, FIP-1, RRAGA ([HGNC:16963](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=16963))

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**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.

**RRAGA + RRAGB Polyclonal Antibody - Protein Information****Name** RRAGA ([HGNC:16963](#))**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 (PubMed:[20381137](http://www.uniprot.org/citations/20381137), PubMed:[24095279](http://www.uniprot.org/citations/24095279), PubMed:[25936802](http://www.uniprot.org/citations/25936802), PubMed:[31601708](http://www.uniprot.org/citations/31601708), PubMed:[31601764](http://www.uniprot.org/citations/31601764), PubMed:[38103557](http://www.uniprot.org/citations/38103557)). Forms heterodimeric Rag complexes with RagC/RRAGC or RagD/RRAGD and cycles between an inactive GDP-bound and an active GTP-bound form: RagA/RRAGA is in its active form when GTP-bound RagA/RRAGA forms a complex with GDP-bound RagC/RRAGC (or RagD/RRAGD) and in an inactive form when GDP-bound RagA/RRAGA heterodimerizes with GTP-bound RagC/RRAGC (or RagD/RRAGD) (PubMed:[20381137](http://www.uniprot.org/citations/20381137))

target="\_blank">20381137</a>, PubMed:<a href="http://www.uniprot.org/citations/24095279" target="\_blank">24095279</a>, PubMed:<a href="http://www.uniprot.org/citations/25936802" target="\_blank">25936802</a>, PubMed:<a href="http://www.uniprot.org/citations/31601708" target="\_blank">31601708</a>, PubMed:<a href="http://www.uniprot.org/citations/31601764" target="\_blank">31601764</a>, PubMed:<a href="http://www.uniprot.org/citations/32868926" target="\_blank">32868926</a>). In its GTP-bound active form, promotes the recruitment of mTORC1 to the lysosomes and its subsequent activation by the GTPase RHEB (PubMed:<a href="http://www.uniprot.org/citations/20381137" target="\_blank">20381137</a>, PubMed:<a href="http://www.uniprot.org/citations/25936802" target="\_blank">25936802</a>, PubMed:<a href="http://www.uniprot.org/citations/31601708" target="\_blank">31601708</a>, PubMed:<a href="http://www.uniprot.org/citations/31601764" target="\_blank">31601764</a>). Involved in the RCC1/Ran-GTPase pathway (PubMed:<a href="http://www.uniprot.org/citations/9394008" target="\_blank">9394008</a>). May play a direct role in a TNF-alpha signaling pathway leading to induction of cell death (PubMed:<a href="http://www.uniprot.org/citations/8995684" target="\_blank">8995684</a>).

### Cellular Location

Cytoplasm. Nucleus. Lysosome membrane Note=Predominantly cytoplasmic (PubMed:8995684, PubMed:9394008) Recruited to the lysosome surface by the Ragulator complex (PubMed:20381137, PubMed:28935770, PubMed:29158492). May shuttle between the cytoplasm and nucleus, depending on the bound nucleotide state (PubMed:8995684, PubMed:9394008). 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 (PubMed:8995684).

### Tissue Location

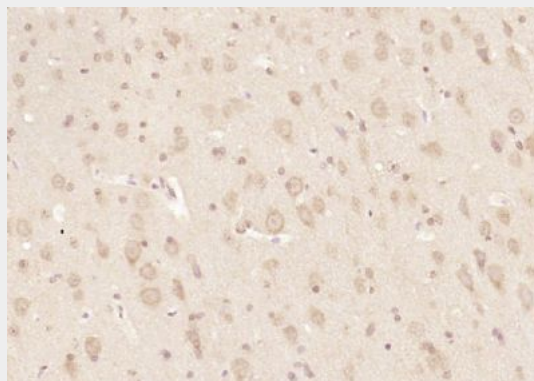
Ubiquitously expressed with highest levels of expression in skeletal muscle, heart, and brain

### RRAGA + RRAGB Polyclonal Antibody - Protocols

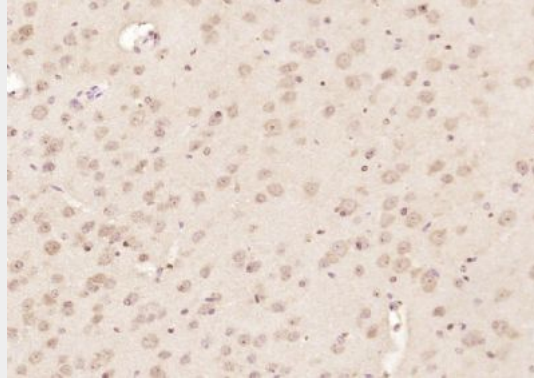
Provided below are standard protocols that you may find useful for product applications.

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

### RRAGA + RRAGB Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (RRAGA + RRAGB) Polyclonal Antibody, Unconjugated (bs-10731R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (RRAGA + RRAGB) Polyclonal Antibody, Unconjugated (bs-10731R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.