

**RRAGA Antibody - C-terminal region**  
**Rabbit Polyclonal Antibody**  
**Catalog # AI16124****Specification**

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**RRAGA Antibody - C-terminal region - Product Information**

Application	WB
Primary Accession	<a href="#">O7L523</a>
Other Accession	<a href="#">NP_006561</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34kDa KDa

**RRAGA Antibody - C-terminal region - Additional Information****Gene ID** 10670**Alias Symbol** RRAGA,**Other Names**

Ras-related GTP-binding protein A, Rag A, RagA, Adenovirus E3 14.7 kDa-interacting protein 1, FIP-1, RRAGA (&lt;a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=16963" target="\_blank"&gt;HGNC:16963&lt;/a&gt;)

**Format**

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

**Reconstitution & Storage**

Add 50 &amp;mu; l of distilled water. Final Anti-RRAGA antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles.

**Precautions**

RRAGA Antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

**RRAGA Antibody - C-terminal region - 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:&lt;a href="http://www.uniprot.org/citations/20381137" target="\_blank"&gt;20381137&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/24095279" target="\_blank"&gt;24095279&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/25936802" target="\_blank"&gt;25936802&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/31601708" target="\_blank"&gt;31601708&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/31601764" target="\_blank"&gt;31601764&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/38103557" target="\_blank"&gt;38103557&lt;/a&gt;). 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:<a href="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 Regulator 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**

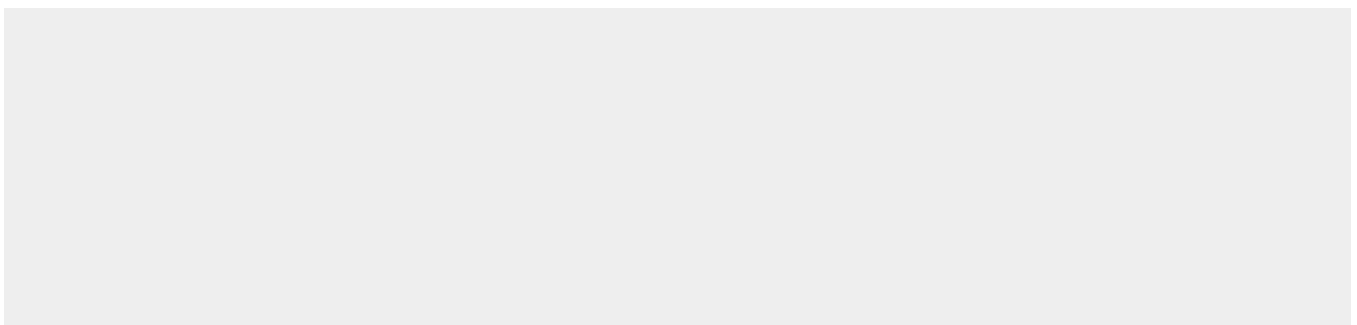
Ubiquitously expressed with highest levels of expression in skeletal muscle, heart, and brain

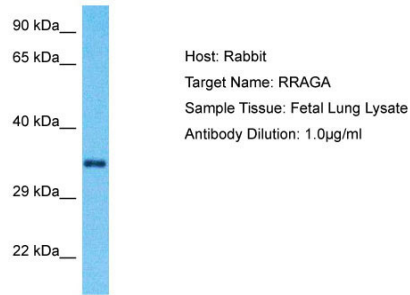
#### **RRAGA Antibody - C-terminal region - Protocols**

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 Antibody - C-terminal region - Images**





Host: Rabbit  
Target Name: RRAGA  
Sample Tissue: Fetal Lung lysates  
Antibody Dilution: 1µg/ml

### **RRAGA Antibody - C-terminal region - Background**

Guanine nucleotide-binding protein forming heterodimeric Rag complexes required for the amino acid-induced relocalization of mTORC1 to the lysosomes and its subsequent activation by the GTPase RHEB. This is a crucial step in the activation of the TOR signaling cascade by amino acids. 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.

### **RRAGA Antibody - C-terminal region - References**

- Schuermann A.,et al.J. Biol. Chem. 270:28982-28988(1995).
- Li Y.,et al.J. Virol. 71:1576-1582(1997).
- Hirose E.,et al.J. Cell Sci. 111:11-21(1998).
- Ota T.,et al.Nat. Genet. 36:40-45(2004).
- Humphray S.J.,et al.Nature 429:369-374(2004).