

## Anti-RagA/B Antibody

Catalog # AP53887

### Specification

#### Anti-RagA/B Antibody - Product Information

Application	<b>WB, IH</b>
Primary Accession	<a href="#">Q7L523</a>
Other Accession	<a href="#">Q5VZM2</a>
Reactivity	<b>Human, Mouse, Rat</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>36566</b>

#### Anti-RagA/B Antibody - Additional Information

**Gene ID** 10670

#### Other Names

RRAGA; Ras-related GTP-binding protein A; Rag A; RagA; Adenovirus E3 14.7 kDa-interacting protein 1; FIP-1; RRAGB; Ras-related GTP-binding protein B; Rag B; RagB

#### Target/Specificity

Recognizes endogenous levels of RagA/B protein.

#### Dilution

WB~~1/500 - 1/1000  
IH~~1/50 - 1/200

#### Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.

#### Storage

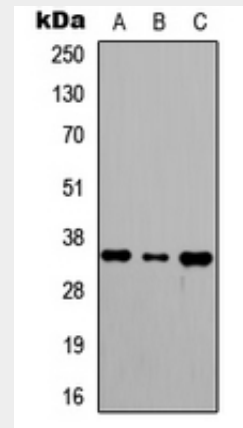
Store at -20 °C. Stable for 12 months from date of receipt

#### Anti-RagA/B Antibody - Protein Information

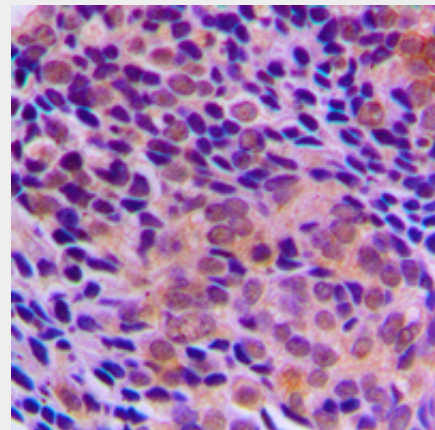
**Name** RRAGA ([HGNC:16963](#))

#### Function

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



Western blot analysis of RagA/B expression in MCF7 (A), HeLa (B), mouse brain (C) whole cell lysates.



Immunohistochemical analysis of RagA/B staining in human prostate cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

#### Anti-RagA/B Antibody - Background

to amino acid availability through regulation of the mTORC1 signaling cascade (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>). Forms heterodimeric Rag complexes with RRAGC or RRAGD and cycles between an inactive GDP-bound and an active GTP-bound form (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>). In its active form participates in the relocalization 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>). 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.  
Note=Predominantly cytoplasmic. 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

Rabbit polyclonal antibody to RagA/B

brain

### **Anti-RagA/B 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](#)