

Rag C Polyclonal Antibody
Catalog # AP72175**Specification**

Rag C Polyclonal Antibody - Product Information

Application	WB
Primary Accession	Q9HB90
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

Rag C Polyclonal Antibody - Additional Information

Gene ID 64121

Other Names

RRAGC; Ras-related GTP-binding protein C; Rag C; RagC; GTPase-interacting protein 2; TIB929

Dilution

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

Rag C Polyclonal Antibody - Protein InformationName RRAGC ([HGNC:19902](#))**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:[27234373](http://www.uniprot.org/citations/27234373), PubMed:[31601708](http://www.uniprot.org/citations/31601708), PubMed:[31601764](http://www.uniprot.org/citations/31601764), PubMed:[32612235](http://www.uniprot.org/citations/32612235), PubMed:[34071043](http://www.uniprot.org/citations/34071043), PubMed:[36697823](http://www.uniprot.org/citations/36697823), PubMed:[37057673](http://www.uniprot.org/citations/37057673)). Forms heterodimeric Rag complexes with RagA/RRAGA or RagB/RRAGB and cycles between an inactive GTP-bound and an active GDP-bound form: RagC/RRAGC is in its active form when GDP-bound RagC/RRAGC forms a complex with GTP-bound RagA/RRAGA (or RagB/RRAGB) and in an inactive form when GTP-bound RagC/RRAGC heterodimerizes with GDP-bound RagA/RRAGA (or RagB/RRAGB) (PubMed:[24095279](http://www.uniprot.org/citations/24095279))

target="_blank">24095279, PubMed:31601708, PubMed:31601764, PubMed:32868926). In its GDP-bound active form, promotes the recruitment of mTORC1 to the lysosomes and its subsequent activation by the GTPase RHEB (PubMed:20381137, PubMed:24095279, PubMed:27234373, PubMed:32612235, PubMed:36697823). This is a crucial step in the activation of the MTOR signaling cascade by amino acids (PubMed:20381137, PubMed:24095279, PubMed:27234373). Also plays a central role in the non-canonical mTORC1 complex, which acts independently of RHEB and specifically mediates phosphorylation of MiT/TFE factors TFEB and TFE3: GDP-bound RagC/RRAGC mediates recruitment of MiT/TFE factors TFEB and TFE3 (PubMed:32612235, PubMed:36697823).

Cellular Location

Cytoplasm. Nucleus. Lysosome membrane Note=Predominantly cytoplasmic (PubMed:11073942). Recruited to the lysosome surface by the Ragulator complex (PubMed:20381137, PubMed:28935770). May shuttle between the cytoplasm and nucleus, depending on the bound nucleotide state of associated RRAGA (PubMed:11073942).

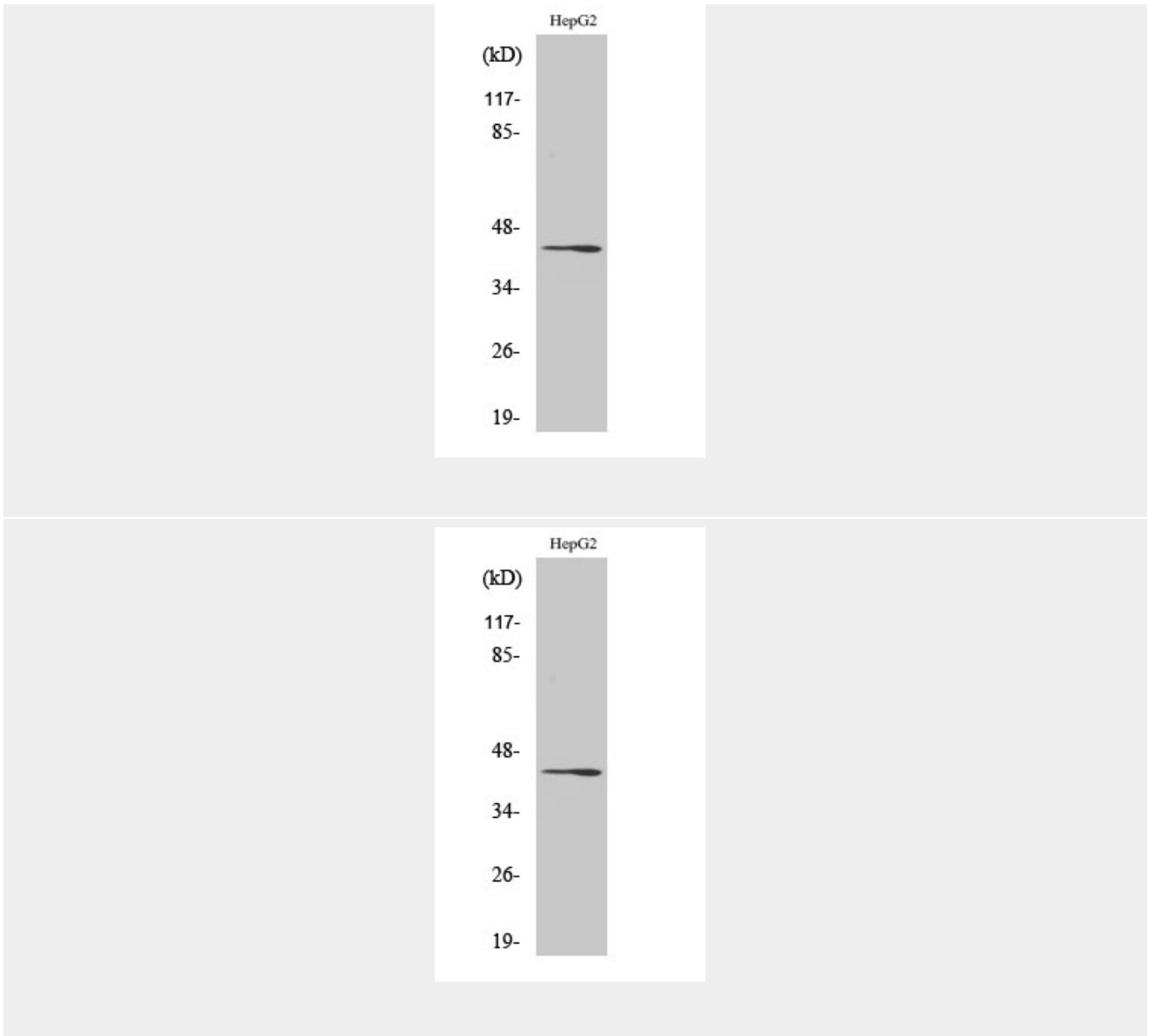
Rag C Polyclonal Antibody - Protocols

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](#)

Rag C Polyclonal Antibody - Images





Rag C Polyclonal Antibody - 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.