

Anti-RagA / RRAGA antibody, rabbit serum

71-020 100 ul

RagA (313 aa, 36.6 kDa) is the human homologue of Gtr1 identified in yeast and classified as the Ras-like small G protein family. In cytoplasm, GTP-bound RagA usually forms a heterodimer with RagD, interacts with Nop132 to be transported to the nucleous. GTP of RagA is hydrolyzed to GDP by RCC, guanine nucleotide exchange factor for RanGTPase bound to chromatin. RagA-RCC signal pathway has a crucial role in cell growth and differentiation. RagA is also well known to be involved in mTOR signaling via binding with raptor, a component of mTORC1 complex, in an amino acid sensitive manner.

Cellular localization: Predominantly in cytoplasm. May shuttle between the cytoplasm and nucleus, depending on the bound nucleotide state.



2. Yasemin S *et al* "The Rag GTPases bind raptor and mediate amino acid signaling to mTORC1" *Science*. 320(5882): 1496-1501 (2008) PMID: <u>18497260</u>

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Anti-RagA antibody

DAPI

Merged





antibody, anti-rabbit IgG antibody conjugated with Alexa Fluor 647 was used at 1/1,000 dilution.

DNA was stained with DAPI and the merged image was shown on right. BioAcademia,Inc. Tel. 81-6-6877-2335 Fax. 81-6-6877-2336 <u>info@bioacademia.co.jp</u> <u>http://www.bioacademia.co.jp/en/</u>