

Store at -20C

#3830

# RagB Antibody



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**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 40	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #Q5VZM2	<b>Entrez-Gene Id:</b> 10325
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**Product Usage Information****Application**

Western Blotting

**Dilution**

1:1000

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

RagB Antibody detects endogenous levels of total RagB protein.

**Source / Purification**

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the sequence of human RagB protein. Antibodies are purified by protein A and peptide affinity chromatography.

**Background**

The mTORC1 kinase complex is a critical regulator of cell growth (1,2). Its activity is modulated by energy levels, growth factors, and amino acids via signaling through Akt, MAPK, and AMPK pathways (3,4). Recent studies found that the four related GTPases, RagA, RagB, RagC, and RagD, interact with raptor within the mTORC1 complex (1,2). These interactions are both necessary and sufficient for mTORC1 activation in response to amino acid signals (1,2).

**Background References**

1. Sancak, Y. et al. (2008) *Science* 320, 1496-501.
2. Kim, E. et al. (2008) *Nat Cell Biol* 10, 935-45.
3. Hay, N. and Sonenberg, N. (2004) *Genes Dev* 18, 1926-45.
4. Wullschleger, S. et al. (2006) *Cell* 124, 471-84.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting

**Cross-Reactivity Key**

**H:** Human

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