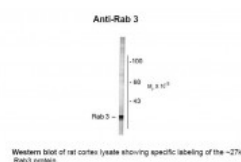




## Rab 3 Antibody

CATALOG NUMBER: 50-187



Western blot of rat cortex lysate showing specific labeling of the ~27k Rab3 protein.

### Specifications

<b>SPECIES REACTIVITY:</b>	Human, Mouse, Rat, Xenopus
<b>TESTED APPLICATIONS:</b>	WB
<b>USER NOTE:</b>	Optimal dilutions for each application to be determined by the researcher.
<b>PREDICTED MOLECULAR WEIGHT:</b>	27
<b>IMMUNOGEN:</b>	Peptide corresponding to amino acid residues from the N-terminal region of rat Rab 3, conjugated to keyhole limpet hemocyanin (KLH).
<b>HOST SPECIES:</b>	Rabbit

### Properties

<b>PURIFICATION:</b>	Affinity Purified
<b>PHYSICAL STATE:</b>	Liquid
<b>BUFFER:</b>	100 uL in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 ug per mL BSA and 50% glycerol.
<b>STORAGE CONDITIONS:</b>	Rab 3 antibody can be stored at -20°C and is stable at -20°C for at least 1 year.
<b>CLONALITY:</b>	Polyclonal
<b>CONJUGATE:</b>	Unconjugated

### Additional Info

<b>ALTERNATE NAMES:</b>	RAB3
<b>ACCESSION NO.:</b>	P63012
<b>PROTEIN GI NO.:</b>	51702793
<b>OFFICIAL SYMBOL:</b>	Rab3a
<b>GENE ID:</b>	25531

### Background

**BACKGROUND:** Rab proteins belong to the Ras small GTPase superfamily. The GTP-binding Rab3 subfamily has 4 known isoforms: 3A, 3B, 3C, and 3D (Schluter et al., 2004). These proteins are expressed in highest concentrations in

brain and endocrine tissues and involved in regulated exocytosis of hormones and neurotransmitters (Coppola et al., 2002). Specifically, Rab3's are thought to play a key role in presynaptic vesicle trafficking and priming (Schluter et al., 2006).

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**REFERENCES:**

1) Schluter OM, Schmitz F, Jahn R, Rosenmund C, Sudhof TC (2004) A Complete Genetic Analysis of Neuronal Rab3 Function. *J Neuroscience* 24(29):6629-6637

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2) Schluter OM, Basu J, Sudhof TC, Rosenmund C (2006) Rab3 Superprimes Synaptic Vesicles for Release: Implications for Short-term Synaptic Plasticity. *J Neuroscience* 26(4):1239-1246

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3) Coppola T, Perret-Menoud V, Gattesco S, Magnin S, Pombo I, Blank U, Regazzi R (2002) The death domain of Rab3 guanine nucleotide exchange protein in GDP/GTP exchange activity in living cells. *J Biochem* 362 (Pt.2):273-9.

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**FOR RESEARCH USE ONLY**

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