

Rab 3a

Cat.No. 107 111BT; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg purified IgG, lyophilized, biotin-labeled. . For reconstitution add 100 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining) IP: yes ICC: 1 : 1000 up to 1 : 2000 IHC: 1 : 200 IHC-P/FFPE: not tested yet ELISA: yes (see remarks)
Label	biotin
Clone	42.2
Subtype	IgG1 (κ light chain)
Immunogen	Recombinant protein corresponding to AA 1 to 220 from rat Rab3a (UniProt Id: P63012)
Epitop	Epitop: AA 191 to 220 from rat Rab3a (UniProt Id: P63012)
Reactivity	Reacts with: human (P20336), rat (P63012), mouse (P63011), mammals. Other species not tested yet.
Specificity	Specific for mammalian Rab 3a. (K.O. verified)
Remarks	ELISA: Suitable as capture antibody for sandwich-ELISA with cat. no. 107 102 as detector antibody (protocol for sandwich-ELISA).

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Rab 3 is a member of the Rab protein family that belongs to the ras-related superfamily of small monomeric GTPases. Four related isoforms of Rab 3 are known (**Rab 3a**, 3b, **3c**, and **3d**). Rab 3a and 3c are predominantly expressed in neurons and neuroendocrine cells where they are localized to synaptic vesicles. Unlike the integral membrane proteins of synaptic vesicles, Rab 3a/c is absent from the Golgi complex and thus does not result in immunostaining of the axo-dendritic region as sometimes seen with e.g. synaptophysin, synaptobrevin/VAMP, or synaptogyrin. Rab 3b and 3d are expressed in non-neuronal tissues such as adipocytes and the exocrine pancreas (3d). It has been shown that overexpression of Rab 3 inhibits Ca²⁺ regulated exocytosis and converts it into an constitutive Ca²⁺ independent exocytosis mechanism.

Selected General References

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