

MTMR5 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP56624

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	O95248
Reactivity	Rat, Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	208443

Additional Information

Gene ID	6305
Other Names	Myotubularin-related protein 5, Inactive phosphatidylinositol 3-phosphatase 5, SET-binding factor 1, Sbf1, SBF1, MTMR5
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	SBF1
Synonyms	MTMR5
Function	Acts as an adapter for the phosphatase MTMR2 to regulate MTMR2 catalytic activity and subcellular location (PubMed: 12668758). Promotes the exchange of GDP to GTP, converting inactive GDP-bound Rab proteins into their active GTP-bound form (PubMed: 20937701). May function as a guanine nucleotide exchange factor (GEF) activating RAB28 (PubMed: 20937701). Acts as a suppressor of autophagy in neurons (PubMed: 35580604). Together with its binding partner, the phosphatase MTMR2, plays a role in dephosphorylation of phosphoinositides critical for autophagy initiation and autophagosome maturation (PubMed: 35580604). Plays a role in positively regulating late-stage radial sorting of large caliber axons, a process leading to myelination by Schwann cells, possibly via regulating endosomal trafficking (By similarity). Inhibits myoblast differentiation in vitro and induces oncogenic transformation in fibroblasts (PubMed: 9537414).
Cellular Location	Cytoplasm. Cytoplasm, perinuclear region. Cell projection, neuron projection.

Note=Localized in neuronal somata and processes with punctate/vesicular morphology

Tissue Location

Expressed in neurons within the frontal cortex, in neurons of the deep cerebellar nuclei, stellate and basket cells of the molecular layer, and Golgi cells of the granular layer (at protein level).

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