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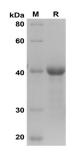
Recombinant Mouse RAB5B Protein(Trx Tag)

Catalog Number: PDEM100201

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Mouse
Source	E.coli-derived Mouse RAB5B protein Met1-Asn215, with an N-terminal Trx
Calculated MW	43.6 kDa
Observed MW	40 kDa
Accession	P61021
Bio-activity	Not validated for activity
Properties	
Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20 °C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5%
	Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of
	0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Mouse RAB5B proteins, 2µg/lane of Recombinant Mouse RAB5B proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 40

KD

Background

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Rab5b is a member of the Rab family of small (monomeric) G proteins. Like other small G proteins, Rab5b switches between an inactive, GDP-form and an active, GTP-bound form. GDP/GTP exchange factors (GEFs) catalyse the conversion from the GDP-bound form to the GTP-bound form, while GTPase-activating proteins (GAPs) catalyse GTP hydrolysis to GDP. Rab5b is involved in endocytosis and recycling of cell surface molecules. It interacts with RIN2 and RIN3, which regulate its function, possibly by acting as GEFs. Knockdown of Rab5b abolished group I metabotropic glutamate receptor (mGluR)-mediated neuroprotection. Furthermore, Rab5b interacts with LRRK2, the defective gene at the PARK8 locus that results in Parkinson's disease. Roles for Rab5b in neurodegenerative disease, neuroprotection, and synaptic plasticity have been suggested.