SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Mouse Anti-RAB5B antibody

SLM-51720M

Product Name	RAB5B
Chinese Name	RAS 相关蛋白 Rab5B 单克隆抗体
Alias	Rab 5b; Rab5 b; RAB5B, member RAS oncogene family; Ras related protein Rab 5B; RAB5B_HUMAN.
Research Area	Chromatin and nuclear signals Epigenetics Ubiquitin
Immunogen Species	Mouse
Clonality	Monoclonal
Clone NO.	D4F6
React Species	Human, Mouse,
Applications	WB=1:500-2000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	24kDa
Cellular localization	cytoplasmic The cell membrane
Form	Liquid
Concentration	1mg/ml
immunogen	Recombinant human RAB5B.
Lsotype	IgG1,κ
Purification	affinity purified by Protein G
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed
Product Detail	The Ras-related superfamily of guanine nucleotide binding proteins, which includes the R-Ras, Rap, Ral/Rec and Rho/Rab subfamilies, exhibit 30-60% homology with Ras p21. Accumulating data suggests an important role for

Rab proteins, either in endocytosis or in biosynthetic protein transport. The transport of newly synthesized proteins from the endoplasmic reticulum to various stacks of the Golgi complex and to secretory vesicles involves at each stage the movement of carrier vesicles, a process that appears to involve Rab protein function. The possibility that Rab proteins might also direct the exocytosis from secretory vesicles to the plasma membrane is supported by the observation that in yeast, the SEC4 protein, which is 40% homologous to Rab proteins, is associated with secretory vesicles. At least eight members of the Rab subfamily have been identified, each of which is found at a particular stage of a membrane transport pathway.

Function:
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.

Subunit:
Binds EEA1. Interacts with RIN2 and RIN3, which probably regulate its pathway, possibly by acting as GEFs.

Subcellular Location:
Cell membrane; Lipid-anchor; Cytoplasmic side. Early endosome membrane; Lipid-anchor. Melanosome. Note=Enriched in stage I melanosomes.

Similarity:
Belongs to the small GTPase superfamily. Rab family.

SWISS:
P61020

Gene ID:
5869

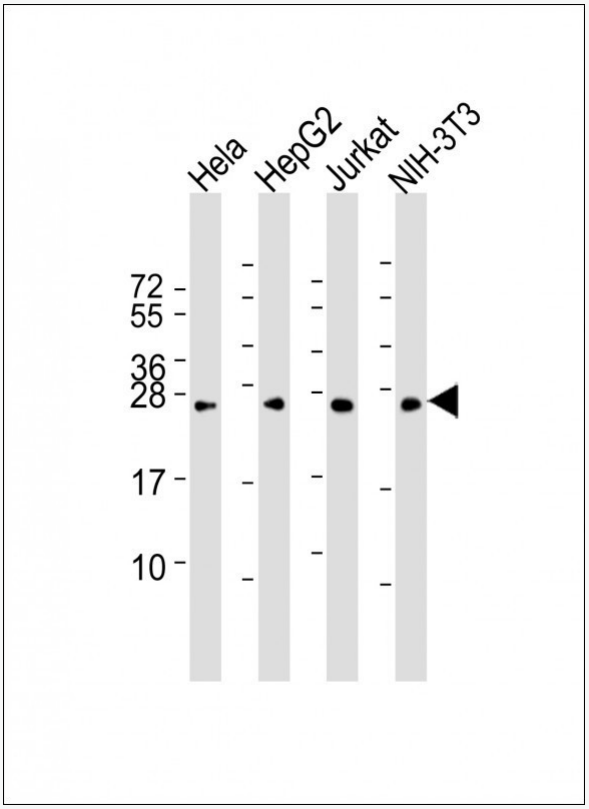
Database links:

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Entrez Gene: 5869 Human

SwissProt: P61020 Human

Product Picture



Sample:

Lane 1: Hela cell lysates

Lane 2: HepG2 cell lysates

Lane 3: Jurkat cell lysates

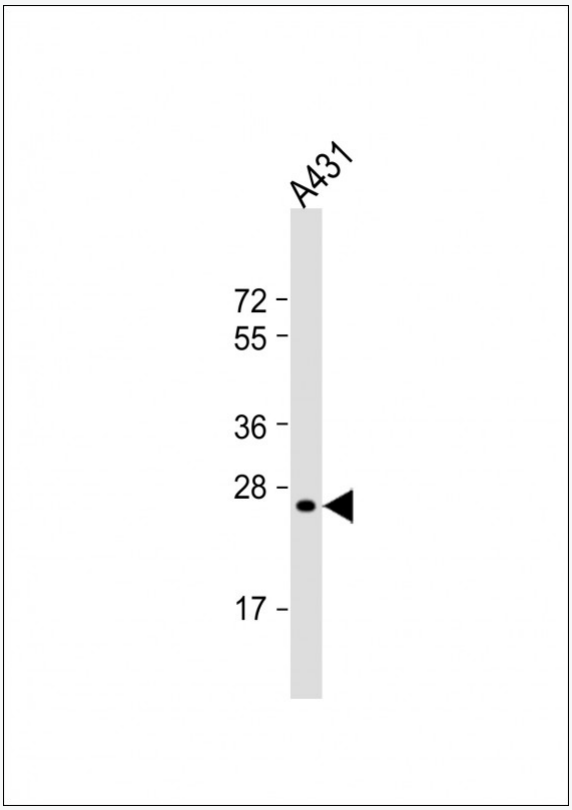
Lane 4: NIH-3T3 cell lysates

Primary: Anti-RAB5B (SLM-51720M) at 1/2000 dilution

Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size: 24 kD

Observed band size: 26 kD



Sample:

Lane 1: A431 cell lysates

Primary: Anti-RAB5B (SLM-51720M) at 1/2000 dilution

Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size: 24 kD

Observed band size: 24 kD