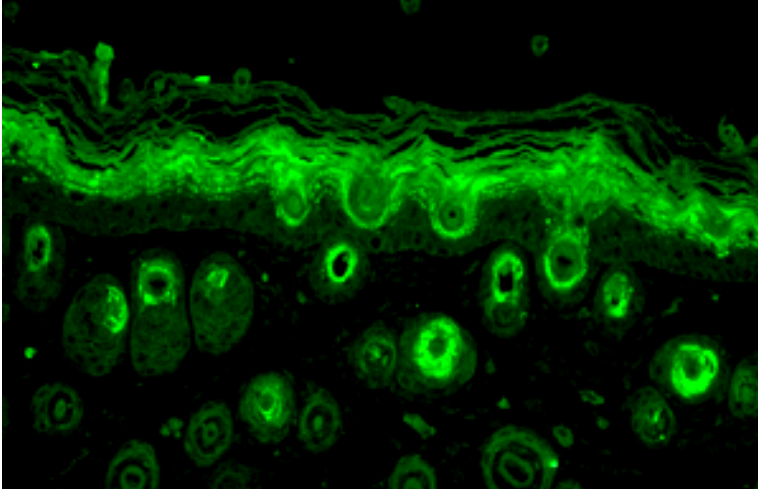


RAS-Related Protein RAB4 and RAB5 Antibodies and Protein

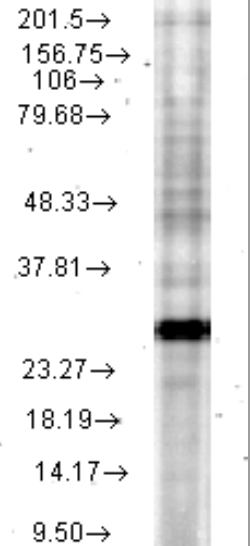
Anti-RAB5 (SPC-168)
Mouse Backskin



RAB4 Antibody

Cat. No. SPC-141
Available in 25µL/ 100µL

Western blot analysis of Rab4 in HeLa cell lysates, using a 1:1000 dilution of SPC-141.



Description	Catalog No.	Size
Rabbit Anti- RAB4 Polyclonal Antibody <i>Species Reactivity:</i> Hu/Ms/Rt	SPC-141C	25µg
	SPC-141D	100µg
Rabbit Anti- RAB5 , Polyclonal Antibody <i>Species Reactivity:</i> Hu/Ms/Mk/Bv/Rt	SPC-168C	25µg
	SPC-168D	100µg
Human RAB5 Recombinant Protein, His-tag	SPR-121A	50µg
	SPC-121B	100µg
	SPR-121C	200µg

Rab GTPases are central regulators of membrane trafficking in the eukaryotic cell. Their regulatory capacity depends on their ability to cycle between the GDP-bound inactive and GTP-bound active states. This conversion is regulated by GDP/GTP exchange factors (GEPs), GDP dissociation inhibitors (GDIs) and GTPase-activating proteins (GAPs) (1, 2). Activation of a Rab protein is coupled to its association with intracellular membranes, allowing it to recruit downstream effector proteins to the cytoplasmic surface of a sub-cellular compartment (3). Through these proteins, Rab GTPases regulate vesicle formation, actin- and tubulin-dependent vesicle movement, and membrane fusion (1). Rab proteins contain conserved regions involved in guanine-nucleotide binding, and hyper-variable COOH-terminal domains with a cysteine motif implicated in sub-cellular targeting. Post-translational modification of the cysteine motif with one or two geranylgeranyl groups is essential for the membrane association and correct intracellular localization of Rab proteins (3). Each Rab shows a characteristic sub-cellular distribution (4).

1. Stenmark H., and Olkkonen V.M. (2001) *Genome Biol.* 2: 3007.1-3007.7.
2. Takai Y., et al. (2001) *Physiol. Rev.* 81: 153-208.
3. Ali B.R., et al. (2004) *J. Cell Sci.* 117: 6401-6412.
4. Zerial M., and McBride H. (2001) *Nat. Rev. Mol. Cell Biol.* 2: 107-117.