

Product name:	RAB11A (4O16) Rabbit Monoclonal Antibody
Cat number:	MABN16767
Conjugate:	Unconjugated
Size:	100µL
Clone:	Monoclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	A synthetic peptide of human Rab11A
Reactivity:	Human, Mouse, Rat
Applications:	WB 1:2000-1:20000, IP 1:10-1:100
Molecular Weight:	24kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

Rab11a, Rab11b and Rab25 are members of the Rab11 family of small Ras-like GTPases. Rab11 (isoforms Rab11a and Rab11b) functions as a key regulator in the recycling of perinuclear, plasma membrane and Golgi compartment endosomes. Despite some overlap, distinct differences exist between Rab11a and Rab11b in both their cellular distribution and functional roles. Rab11a is ubiquitously expressed while Rab11b is found mainly in the heart and brain. Like other Rab proteins, Rab11 exerts its function via interactions with Rab11 family interacting proteins (FIPs). The small GTPases Rab are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes. Rabs cycle between an inactive GDP-bound form and an active GTP-bound form that is able to recruit to membranes different set of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion. The small Rab GTPase RAB11A regulates endocytic recycling. Acts as a major regulator of membrane delivery during cytokinesis. Together with MYO5B and RAB8A participates in epithelial cell polarization. Together with RAB3IP, RAB8A, the exocyst complex, PARD3, PRKCI, ANXA2, CDC42 and DNMBP promotes transcytosis of PODXL to the apical membrane initiation sites (AMIS), apical surface formation and lumenogenesis. Together with MYO5B participates in CFTR trafficking to the plasma membrane and TF (Transferrin) recycling in nonpolarized cells. Required in a complex with MYO5B and RAB11FIP2 for the transport of NPC1L1 to the plasma membrane. Participates in the sorting and basolateral transport of CDH1 from the Golgi apparatus to the plasma membrane. Regulates the recycling of FCGRT (receptor of Fc region of monomeric Ig G) to basolateral membranes. May also play a role in melanosome transport and release from melanocytes.