Data Sheet (Cat.No.TMAB-12257)

TargetMol

Anti-RIM2 Polyclonal Antibody

Product Details

Ig Type:	IgG
Reactivity:	Human (predicted:Mouse,Rat,Chicken,Dog,Cow,Horse,Rabbit,Sheep)
Molecular Weight:	Theoretical: 160 kDa.
Purification:	Protein A purified

Applications

Verified Activity:	Blank control: A431. Primary Antibody (green line): Rabbit Anti-RIM2 antibody (TMAB-12257) Dilution: 3 μg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG. Secondary Antibody: Goat anti-rabbit IgG-AF647 Dilution: 3 μg /test. Protocol The cells were incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.
Application:	FCM
Recommended	FCM: 3μg/Test

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	KLH conjugated synthetic peptide: human RIM2
Antigen Species:	Human
Gene ID:	9699
Uniprot ID:	Q9UQ26

Research Background

Rab3, a neural/neuroendocrine-specific member of the Rab family, is involved in Ca2+-regulated exocytosis (1-2). Rab3 functions in an inhibitory capacity by controlling the recruitment of secretory vesicles into a releasable pool at the plasma membrane. Rim (rab3 interacting molecule), a putative effector protein for Rab3s, is composed of an amino-terminal zinc-finger motif and carboxy-terminal PDZ and C2 domains. Rim exists as two variants, Rim1 and Rim2, produced by alternative splicing (3). Rim1 is expressed near the active zone at the synapse, where it interacts in a GTP-dependent manner with Rab3, located on synaptic vesicles (4). Therefore, Rim serves as a Rab3-dependent regulator of synaptic-vesicle fusion by forming a GTP-dependent complex between synaptic plasma membranes and docked synaptic vesicles (5). Both Rim1 and Rim2 can bind to cAMP-GEFII, which is a direct target of cAMP in

regulated exocytosis and is responsible for cAMP-dependent, PKA-dependent exocytosis (3). Rim also localizes on the plasma membrane of INS-1E cells and pancreatic beta-cells. Rab3 binding domain of Rim enhances glucose-stimulated secretion in intact cells and Ca2+-stimulated exocytosis in permeabilized cells, suggesting that Rim may also play a regulatory role in insulin secretion (6).

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