Recombinant RET Proto-oncogene Antibody

Rabbit Monoclonal Antibody [Clone RET/13980R]

Catalog No	Format	Size
5979-RBM21-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
5979-RBM21-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
5979-RBM21-P1ABX	Purified Ab WITHOUT BSA or Azide at 1.0mg/ml	100 ug

Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Product Details

Clone	RET/13980R
Immunogen	Recombinant fragment (around aa702-848) of the human RET Oncogene protein (exact sequence is proprietary)
Host	Rabbit
Clonality	Monoclonal
Isotype / Light Chain	IgG / Kappa
Mol. Weight of Antigen	124.32kDa
Cellular Localization	Cell membrane, Endosome membrane
Species Reactivity	Human

**Optimal dilution for a specific application should be determined.*

Product Images for Recombinant RET Proto-oncogene Antibody

Specificity & Comments

Receptor tyrosine-protein kinase involved in numerous cellular mechanisms including cell proliferation, neuronal navigation, cell migration, and cell differentiation in response to glia cell line-derived growth family factors (GDNF, NRTN, ARTN, PSPN and GDF15) (PubMed:20064382, PubMed:20616503, PubMed:20702524, PubMed:21357690, PubMed:21454698, PubMed:24560924, PubMed:28846097, PubMed:28846099, PubMed:28953886, PubMed:31118272). In contrast to most receptor tyrosine kinases, RET requires not only its cognate ligands but also coreceptors, for activation (PubMed:21994944, PubMed:23333276, PubMed:28846097, PubMed:28846099, PubMed:28953886). GDNF ligands (GDNF, NRTN, ARTN, PSPN and GDF15) first bind their corresponding GDNFR coreceptors (GFRA1, GFRA2, GFRA3, GFRA4 and GFRAL, respectively), triggering RET autophosphorylation and activation, leading to activation of downstream signaling pathways, including the MAPK- and AKT-signaling pathways (PubMed:21994944, PubMed:23333276, PubMed:24560924, PubMed:25242331, PubMed:28846097, PubMed:28846099, PubMed:28953886). Acts as a dependence receptor via the GDNF-GFRA1 signaling: in the presence of the ligand GDNF in somatotrophs within pituitary, promotes survival and down regulates growth hormone (GH) production, but triggers apoptosis in absence of GDNF (PubMed:20616503, PubMed:21994944). Required for the molecular mechanisms orchestration during intestine organogenesis via the ARTN-GFRA3 signaling: involved in the development of enteric nervous system and renal organogenesis during embryonic life, and promotes the formation of Peyer's patch-like structures, a major component of the gut-associated lymphoid tissue (By similarity). Mediates, through interaction with GDF15-receptor GFRAL, GDF15-induced cell-signaling in the brainstem which triggers an aversive response, characterized by nausea, vomiting, and/or loss of appetite in response to various stresses (PubMed:28846097, PubMed:28846099, PubMed:28953886). Modulates cell adhesion via its cleavage by caspase in sympathetic neurons and mediates cell migration in an integrin (e.g. ITGB1 and ITGB3)-dependent manner (PubMed:20702524, PubMed:21357690). Also active in the absence of ligand, triggering apoptosis through a mechanism that requires receptor intracellular caspase cleavage (PubMed:21357690). Triggers the differentiation of rapidly adapting (RA) mechanoreceptors (PubMed:20064382). Involved in the development of the neural crest (By similarity). Regulates nociceptor survival and size (By similarity). Phosphorylates PTK2/FAK1 (PubMed:21454698)., Isoform 1 in complex with GFRAL induces higher activation of MAPK-signaling pathway than isoform 2 in complex with GFRAL.

Supplied As

200ug/ml of Ab produced in a mammalian-based expression system. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.