

RET Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12639a**Specification**

RET Antibody - Product Information

Application	WB,E
Primary Accession	P07949
Other Accession	NP_066124.1 , NP_065681.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	124319

RET Antibody - Additional Information**Gene ID** 5979**Other Names**

Proto-oncogene tyrosine-protein kinase receptor Ret, Cadherin family member 12, Proto-oncogene c-Ret, Soluble RET kinase fragment, Extracellular cell-membrane anchored RET cadherin 120 kDa fragment, RET, CDHF12, CDHR16, PTC, RET51

Target/Specificity

This RET antibody is generated from rabbits immunized with His fusion protein of human RET.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

RET Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

RET Antibody - Protein Information**Name** RET ([HGNC:9967](#))**Synonyms** CDHF12, CDHR16, PTC, RET51**Function** Receptor tyrosine-protein kinase involved in numerous cellular mechanisms including

cell proliferation, neuronal navigation, cell migration, and cell differentiation upon binding with glial cell derived neurotrophic factor family ligands. Phosphorylates PTK2/FAK1. Regulates both cell death/survival balance and positional information. Required for the molecular mechanisms orchestration during intestine organogenesis; 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. 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. Involved in the development of the neural crest. Active in the absence of ligand, triggering apoptosis through a mechanism that requires receptor intracellular caspase cleavage. Acts as a dependence receptor; 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. Regulates nociceptor survival and size. Triggers the differentiation of rapidly adapting (RA) mechanoreceptors. Mediator of several diseases such as neuroendocrine cancers; these diseases are characterized by aberrant integrins-regulated cell migration. Mediates, through interaction with GDF15-receptor GFRAL, GDF15-induced cell-signaling in the brainstem which induces inhibition of food-intake. Activates MAPK- and AKT- signaling pathways (PubMed:[28846097](#), PubMed:[28953886](#), PubMed:[28846099](#)). Isoform 1 in complex with GFRAL induces higher activation of MAPK- signaling pathway than isoform 2 in complex with GFRAL (PubMed:[28846099](#)).

Cellular Location

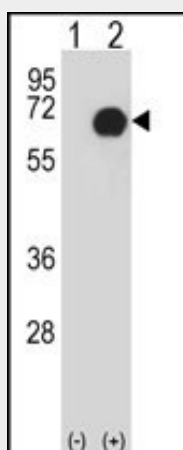
Cell membrane; Single-pass type I membrane protein. Endosome membrane; Single-pass type I membrane protein Note=Predominantly located on the plasma membrane. In the presence of SORL1 and GFRA1, directed to endosomes.

RET Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

RET Antibody - Images



Western blot analysis of RET (arrow) using rabbit polyclonal RET Antibody (Cat. #AP12639a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the RET gene.

RET Antibody - Background

This gene, a member of the cadherin superfamily, encodes one of the receptor tyrosine kinases, which are cell-surface molecules that transduce signals for cell growth and differentiation. This gene plays a crucial role in neural crest development, and it can undergo oncogenic activation in vivo and in vitro by cytogenetic rearrangement. Mutations in this gene are associated with the disorders multiple endocrine neoplasia, type IIA, multiple endocrine neoplasia, type IIB, Hirschsprung disease, and medullary thyroid carcinoma. Two transcript variants encoding different isoforms have been found for this gene. Additional transcript variants have been described but their biological validity has not been confirmed.

RET Antibody - References

Siqueira, D.R., et al. Endocr. Relat. Cancer 17(4):953-963(2010) Gockel, H.R., et al. Hum. Genet. 128(4):353-364(2010) Kim, H.K., et al. Anticancer Res. 30(9):3621-3627(2010) Pacini, F., et al. Clin Oncol (R Coll Radiol) 22(6):475-485(2010) Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :