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RET Antibody (C-term L1027)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7669d

Specification

RET Antibody (C-term L1027) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P07949
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**1012-1042**

RET Antibody (C-term L1027) - 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 a KLH conjugated synthetic peptide between 1012-1042 amino acids from the C-terminal region of human RET.

Dilution
WB~~1:1000
IHC-P~~1:50~100

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 (C-term L1027) is for research use only and not for use in diagnostic or therapeutic procedures.

RET Antibody (C-term L1027) - 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.

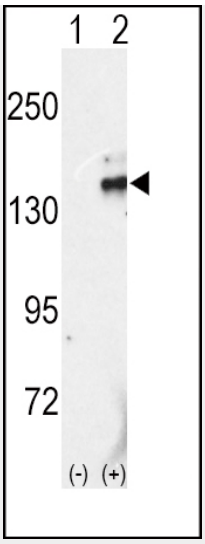
RET Antibody (C-term L1027) - Protocols

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

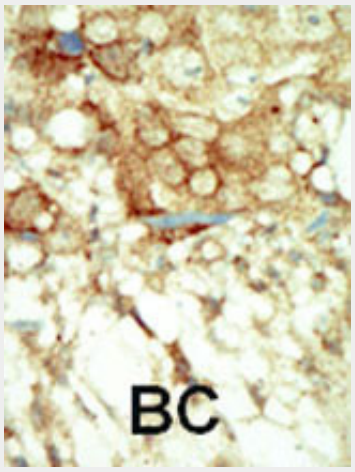
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

RET Antibody (C-term L1027) - Images

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Western blot analysis of RET (arrow) using rabbit polyclonal RET Antibody (C-term L1027) (Cat.#AP7669d). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the RET gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

RET Antibody (C-term L1027) - Background

RET, a member of the cadherin superfamily, is one of the receptor tyrosine kinases, which are cell-surface molecules that transduce signals for cell growth and differentiation. This protein plays a crucial role in neural crest development, and the gene can undergo oncogenic activation in vivo and in vitro by cytogenetic rearrangement. Mutations i are associated with the disorders multiple endocrine neoplasia, type IIA, multiple endocrine neoplasia, type IIB, Hirschsprung disease, and medullary thyroid carcinoma.

RET Antibody (C-term L1027) - References

Da Silva, A.M., et al., J. Clin. Endocrinol. Metab. 88(11):5438-5443 (2003).
McWhinney, S.R., et al., J. Clin. Endocrinol. Metab. 88(10):4911-4916 (2003).
D'Alessio, A., et al., Endocrinology 144(10):4298-4305 (2003).
Soares, P., et al., Oncogene 22(29):4578-4580 (2003).
Punales, M.K., et al., J. Clin. Endocrinol. Metab. 88(6):2644-2649 (2003).

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RET Antibody (C-term L1027) - Citations

- siRNA nanoformulation against the ret/PTC1 junction oncogene is efficient in an in vivo model of papillary thyroid carcinoma.