

# Product datasheet

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ARG66837 anti-Ret antibody

Package: 100 μg Store at: -20°C

### **Summary**

Product Description Rabbit Polyclonal antibody recognizes Ret

Tested Reactivity Hu

Tested Application IHC-P, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name Ret

Species Human

Immunogen Synthetic peptide between aa. 191-240 of Human Ret.

Conjugation Un-conjugated

Alternate Names RET51; CDHF12; HSCR1; Proto-oncogene c-Ret; PTC; Proto-oncogene tyrosine-protein kinase receptor

Ret; RET-ELE1; CDHR16; MEN2B; MEN2A; MTC1; EC 2.7.10.1; Cadherin family member 12

# **Application Instructions**

Application table	Application	Dilution
	IHC-P	1:100 - 1:300
	WB	1:500 - 1:2000
	IHC-P: Antigen Retrieval: High-pressure and temperature EDTA buffer (pH 8.0).  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

## **Properties**

Form Liquid

Purification Affinity purification with immunogen.

Buffer PBS, 0.02% Sodium azide, 50% Glycerol and 0.5% BSA.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol and 0.5% BSA

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol

RET

Gene Full Name

ret proto-oncogene

Background

This gene encodes a transmembrane receptor and member of the tyrosine protein kinase family of proteins. Binding of ligands such as GDNF (glial cell-line derived neurotrophic factor) and other related proteins to the encoded receptor stimulates receptor dimerization and activation of downstream signaling pathways that play a role in cell differentiation, growth, migration and survival. The encoded receptor is important in development of the nervous system, and the development of organs and tissues derived from the neural crest. This proto-oncogene can undergo oncogenic activation through both cytogenetic rearrangement and activating point mutations. Mutations in this gene are associated with Hirschsprung disease and central hypoventilation syndrome and have been identified in patients with renal agenesis. [provided by RefSeq, Sep 2017]

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 foodintake. 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). [UniProt]

Calculated Mw

124 kDa

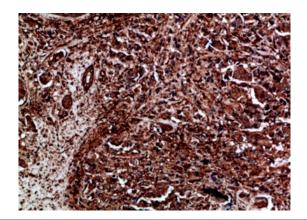
PTM

Autophosphorylated on C-terminal tyrosine residues upon ligand stimulation. Dephosphorylated by PTPRJ on Tyr-905, Tyr-1015 and Tyr-1062.

Proteolytically cleaved by caspase-3. The soluble RET kinase fragment is able to induce cell death. The extracellular cell-membrane anchored RET cadherin fragment accelerates cell adhesion in sympathetic neurons. [UniProt]

Cellular Localization

Cell membrane; Single-pass type I membrane protein. Endosome membrane; Single-pass type I membrane protein. [UniProt]



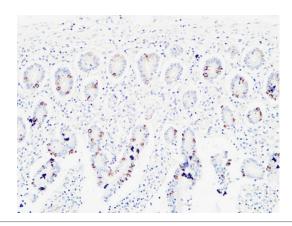
## ARG66837 anti-Ret antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast cancer tissue stained with ARG66837 anti-Ret antibody at 1:200 dilution.



### ARG66837 anti-Ret antibody WB image

Western blot: HepG2 and HeLa cell lysates stained with ARG66837 anti-Ret antibody at 1:1000 dilution.



## ARG66837 anti-Ret antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human colon tissue. Antigen Retrieval: High-pressure and temperature EDTA buffer (pH 8.0). The tissue section was stained with ARG66837 anti-Ret antibody at 1:200 dilution, overnight at 4°C.