10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# Anti-RET Antibody (clone 1A5)

**Mouse Anti Human Monoclonal Antibody**
**Catalog # ALS17900**

## Specification

### Anti-RET Antibody (clone 1A5) - Product Information

| | |
|---|---|
| Application | **WB, IHC-P, E** |
| Primary Accession | P07949 |
| Predicted | **Human** |
| Host | **Mouse** |
| Clonality | **Monoclonal** |
| Isotype | **IgG2a,k** |
| Calculated MW | **124319** |

### Anti-RET Antibody (clone 1A5) - Additional Information

**Gene ID** 5979

| | |
|---|---|
| Alias Symbol | **RET** |

**Other Names**
RET, Cadherin family member 12, CDHF12, C-ret, Hirschsprung disease 1, HSCR1, Hydroxyaryl-protein kinase, Oncogene ret, Proto-oncogene c-Ret, RET-ELE1, RET51, Ret proto-oncogene, RET transforming sequence, RET43, Men2-ret, MEN2B, MTC1, Receptor tyros ...

**Target/Specificity**
Human RET

**Reconstitution & Storage**
Protein A purified

**Precautions**
Anti-RET Antibody (clone 1A5) is for research use only and not for use in diagnostic or therapeutic procedures.

### Anti-RET Antibody (clone 1A5) - 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:<a href="http://www.uniprot.org/citations/28846097" target="_blank">28846097</a>, PubMed:<a href="http://www.uniprot.org/citations/28953886" target="_blank">28953886</a>, PubMed:<a href="http://www.uniprot.org/citations/28846099" target="_blank">28846099</a>). Isoform 1 in complex with GFRAL induces higher activation of MAPK- signaling pathway than isoform 2 in complex with GFRAL (PubMed:<a href="http://www.uniprot.org/citations/28846099" target="_blank">28846099</a>).

**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.

## Anti-RET Antibody (clone 1A5) - 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

## Anti-RET Antibody (clone 1A5) - Images