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Product datasheet for TA328668

RET Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	FC, IF, IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3,000; FC: 1:50-1:600
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide CEWRQGDGKGITR, corresponding to amino acid residues 541-553 of human Ret. Extracellular, N-terminus.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN3.
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	ret proto-oncogene
Database Link:	NP_066124 Entrez Gene 19713 MouseEntrez Gene 24716 RatEntrez Gene 5979 Human P07949

View online »

Background: The RET proto-oncogene on human chromosome 10q11.2, encodes a receptor tyrosine kinase (RTK) activated by members of the glial cell line-derived neurotrophic factor (GDNF) ligand family (GDNF, neurturin, artemin, and persephin) in conjunction with a ligand-specific coreceptor (GFRa1-4). RET belongs to the cadherin superfamily, and it has been suggested that the ret gene is the result of a recombination between a gene encoding a tyrosine kinase receptor and a gene encoding an ancestral cadherin at an early stage of evolution. The extracellular domain of RET comprises, as observed for other tyrosine kinase receptors, a cysteine-rich domain, but also four cadherin-like domains. RET signaling is crucial for the development of the enteric nervous system. RET also regulates the development of sympathetic, parasympathetic, motor, and sensory neurons, and is necessary for the postnatal maintenance of dopaminergic neurons. Outside the nervous system, RET is crucial for development of the kidney and plays a key role in spermatogenesis. RET has attracted considerable clinical interest because of the range of mutations found in diverse conditions that include Hirschsprung disease and a variety of cancers involving the thyroid gland. RET-related cancers with thyroid involvement include sporadic and familial medullary thyroid carcinoma (MTC), multiple endocrine neoplasia 2 (MEN2) syndromes MEN2A and MEN2B, and papillary thyroid carcinoma (PTC).

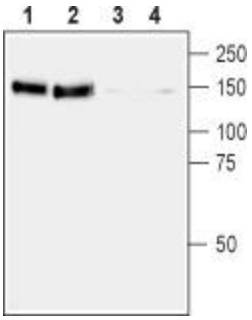
Synonyms: CDHF12; CDHR16; HSCR1; MEN2A; MEN2B; MTC1; PTC; RET-ELE1; RET51

Note: This antibody was tested in live cell imaging. Please see IF/ICC data for detail.

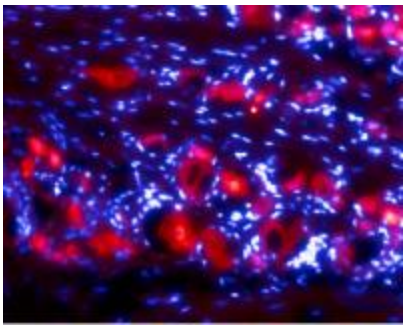
Protein Families: Druggable Genome, Protein Kinase, Transmembrane

Protein Pathways: Endocytosis, Pathways in cancer, Thyroid cancer

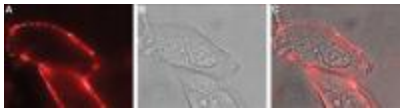
Product images:



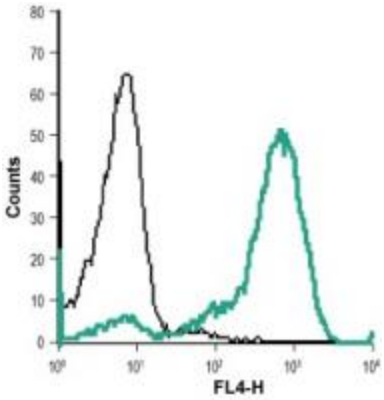
Western blot analysis of rat (lanes 1 and 3) and mouse (lanes 2 and 4) brain membranes: 1, 2. Anti-Ret (extracellular) antibody, (1:200). 3, 4. Anti-Ret (extracellular) antibody, preincubated with the control peptide antigen.



Expression of Ret in rat DRG. Immunohistochemical staining of rat dorsal root ganglia (DRG) frozen sections using Anti-Ret (extracellular) antibody, (1:50). Ret staining (red) is detected in DRG neurons. Hoechst 33342 (blue) is used to stain cell nuclei.



Expression of Ret in human MCF-7 breast adenocarcinoma cells. Immunocytochemical staining of live intact human MCF-7 breast adenocarcinoma cells. A. Extracellular staining of cells with Anti-Ret (extracellular) antibody, (1:25), followed by goat anti-rabbit-AlexaFluor-594 secondary antibody (red). B. Live image of the cells. C. Merge of the two images.



Indirect flow cytometry analysis of live intact human THP-1 monocytic leukemia cell line: black line: Unstained cells + goat-anti-rabbit-AlexaFluor-647 secondary antibody. green line: Cells + Anti-Ret (extracellular) antibody, (1:20) + goat-anti-rabbit-AlexaFluor-647 secondary antibody.