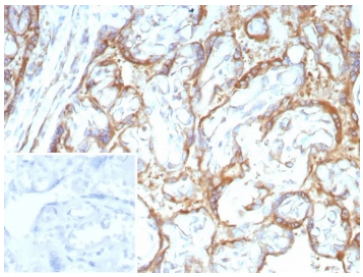
RET Antibody / c-RET [clone RET/8786] (V5443)

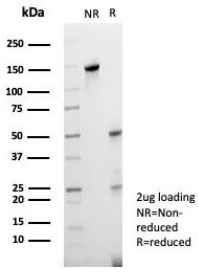
Catalog No.	Formulation	Size
V5443-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5443-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5443SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2c, kappa
Clone Name	RET/8786
Purity	Protein A/G affinity
UniProt	P07949
Localization	Cell membrane, cytoplasm
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This RET/c-RET antibody is available for research use only.



Immunohistochemistry analysis of RET / c-RET antibody (clone RET/8786) in human placental tissue. FFPE human placenta demonstrates membranous and cytoplasmic HRP-DAB brown staining in trophoblastic cells, consistent with RET expression. Staining highlights cell membranes outlining chorionic villi with additional cytoplasmic signal, while surrounding stromal regions show comparatively weaker reactivity. Nuclei are counterstained blue. The inset image represents a secondary antibody negative control in which PBS was used in place of the primary antibody and shows absence of specific staining. Heat induced epitope retrieval was performed by boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9.0, for 20 minutes followed by cooling prior to immunostaining.



SDS-PAGE analysis of purified, BSA-free RET/c-RET antibody (clone RET/8786) as confirmation of integrity and purity.

Description

RET antibody, also known as c-RET antibody, recognizes the RET proto-oncogene product, a transmembrane receptor tyrosine kinase encoded by the human RET gene on chromosome 10q11.21. RET is a cell surface receptor that mediates signaling in response to members of the glial cell line-derived neurotrophic factor family. Structurally, the protein contains extracellular cadherin-like domains, a cysteine-rich region, a single transmembrane segment, and an intracellular tyrosine kinase domain. RET antibody targets a receptor that is primarily localized to the plasma membrane, where ligand binding induces receptor dimerization and activation.

Following ligand engagement through GFR alpha co-receptors, RET undergoes autophosphorylation at specific tyrosine residues within its cytoplasmic domain. These phosphorylation events recruit adaptor proteins that activate downstream pathways including MAPK, PI3K-AKT, and STAT signaling. Through these cascades, c-RET regulates cell proliferation, survival, differentiation, and migration. RET signaling plays critical roles during embryonic development, particularly in neural crest cell migration, enteric nervous system formation, and kidney morphogenesis.

Aberrant RET activation is strongly associated with tumorigenesis. Germline mutations in RET are responsible for multiple endocrine neoplasia type 2 and familial medullary thyroid carcinoma, while somatic RET rearrangements and mutations are detected in papillary thyroid carcinoma and subsets of lung adenocarcinoma. Constitutive activation of the receptor leads to sustained kinase signaling and oncogenic transformation. Alternative splicing generates multiple RET isoforms that may differ in signaling capacity and regulatory interactions.

RET antibody is suitable for detecting c-RET expression in studies of receptor signaling, developmental biology, and cancer research. Clone RET/8786 is designed to recognize RET in research applications, supporting investigation of tyrosine kinase activation, oncogenic mutations, and therapeutic targeting of RET-driven malignancies.

Application Notes

Optimal dilution of the RET/c-RET antibody should be determined by the researcher.

Immunogen

A recombinant fragment (within amino acids 702-848) of human RET protein was used as the immunogen for the RET/c-RET antibody.

Storage

Aliquot the RET/c-RET antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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