



Ret Rabbit mAb

Catalog No	YP-rAb-17298
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,IP,ELISA
Gene Name	RET
Protein Name	Proto-oncogene tyrosine-protein kinase receptor Ret
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1:1000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	Ret;Proto-oncogene tyrosine-protein kinase receptor Ret;RET ; CDHF12 ; CDHR16 ; PTC ; RET51 ; Proto-oncogene tyrosine-protein kinase receptor Ret ; Cadherin family member 12 ; Proto-oncogene c-Ret
Observed Band	175kD
Calculated Molecular Weight	124kD
Cell Pathway	Cell membrane ; Single-pass type I membrane protein . Endosome membrane ; Single-pass type I membrane protein . Predominantly located on the plasma membrane. In the presence of SORL1 and GFRA1, directed to endosomes. .
Tissue Specificity	Blood,Brain,Fibroblast,Leukocyte,Neural crest,Peripheral blood leukocyte,Thyroid papillary
Function	Catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,Disease:Chromosomal aberrations involving RET are a cause of thyroid papillary carcinoma (PACT) [MIM:188550]. Inversion inv(10)(q11.2;q21) generates the RET/CCDC6 oncogene; inversion inv(10)(q11.2;q11.2) generates the RET/NCOA4 oncogene; translocation t(10;14)(q11;q32) with GOLGA5 generates the RET/GOLGA5 oncogene; translocation t(8;10)(p21.3;q11.2) with PCM1 generates the PCM1/RET fusion; translocation t(6;10)(p21.3;q11.2) with RFP generates the Delta RFP/RET oncogene; translocation t(1;10)(p13;q11) with TRIM33 generates the TRIM33/RET oncogene; translocation t(7;10)(q32;q11) with TIF1 generates the TIF1/RET oncogene. The PTC5 oncogene has been found in 2 cases of PACT in children exposed to radioactive fallout after



Chernobyl.,Disease:Defects in RET are a cause of congenital central hypoventilation syndrome (CCHS) [MIM:209880]; also known as congenital failure of autonomic control or Ondine curse. CCHS is a rare disorder characterized by abnormal control of respiration in the absence of neuromuscular or lung disease, or an identifiable brain stem lesion. A deficiency in autonomic control of respiration results in inadequate or negligible ventilatory and arousal responses to hypercapnia and hypoxemia.,Disease:Defects in RET are a cause of Hirschsprung disease (HSCR) [MIM:142623]. HSCR is a genetic disorder of neural crest development characterized by the absence of intramural ganglion cells in the hindgut, often resulting in intestinal obstruction. Occasionally, MEN2A or FMTC occur in association with HSCR.,Disease:Defects in RET are a cause of pheochromocytoma [MIM:171300]. The pheochromocytomas are catecholamine-producing, chromaffin tumors that arise in the adrenal medulla in 90% of cases. In the remaining 10% of cases, they develop in extra-adrenal sympathetic ganglia and may be referred to as "paraganglioma."

Pheochromocytoma usually presents with hypertension. Approximately 10% of pheochromocytoma is hereditary. The genetic basis for most cases of non-syndromic familial pheochromocytoma is unknown.,Disease:Defects in RET are a cause of renal dysplasia [MIM:191830]; also known as renal agenesis or renal aplasia. Renal agenesis refers to the absence of one (unilateral) or both (bilateral) kidneys at birth. Bilateral renal agenesis belongs to a group of perinatally lethal renal diseases, including severe bilateral renal dysplasia, unilateral renal agenesis with contralateral dysplasia and severe obstructive uropathy.,Disease:Defects in RET are the cause of medullary thyroid carcinoma (MTC) [MIM:155240]. MTC is a rare tumor derived from the C cells of the thyroid.

Three hereditary forms are known, that are transmitted in an autosomal dominant fashion: (a) multiple neoplasia type 2A (MEN2A), (b) multiple neoplasia type IIB (MEN2B) and (c) familial MTC (FMTC), which occurs in 25-30% of MTC cases and where MTC is the only clinical manifestation.,Disease:Defects in RET are the cause of multiple neoplasia type 2A (MEN2A) [MIM:171400]; also called multiple neoplasia type 2 (MEN2). MEN2A, the most frequent form of MTC, is an inherited cancer syndrome characterized by MTC, pheochromocytoma and/or hyperparathyroidism.,Disease:Defects in RET are the cause of multiple neoplasia type 2B (MEN2B) [MIM:162300]. MEN2B is an uncommon inherited cancer syndrome characterized by predisposition to MTC and pheochromocytoma which is associated with marfanoid habitus, mucosal neuromas, skeletal and ophthalmic abnormalities, and ganglioneuromas of the intestine tract. Then the disease progresses rapidly with the development of metastatic MTC and a pheochromocytoma in 50% of cases.,Disease:Defects in RET may be a cause of colorectal cancer (CRC) [MIM:114500].,Function:Probable receptor with tyrosine-protein kinase activity; important for development.,polymorphism:The Cys-982 polymorphism may be associated with an increased risk for developing Hirschsprung disease.,PTM:Autophosphorylated on C-terminal tyrosine residues upon ligand stimulation.,PTM:Phosphorylated.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family.,similarity:Contains 1 cadherin domain.,similarity:Contains 1 protein kinase domain.,subunit:Phosphorylated form interacts with the PBT domain of DOK2, DOK4 and DOK5.,

Background

ret proto-oncogene(RET) Homo sapiens This gene, a member of the cadherin superfamily, encodes one of the receptor tyrosine kinases, which are cell-surface molecules that transduce signals for cell growth and differentiation. This gene plays a crucial role in neural crest development, and it can undergo oncogenic activation in vivo and in vitro by cytogenetic rearrangement. Mutations in this gene are associated with the disorders multiple endocrine neoplasia, type IIA, multiple endocrine neoplasia, type IIB, Hirschsprung disease, and medullary thyroid carcinoma. Two transcript variants encoding different isoforms have been found for this gene. Additional transcript variants have been described but their biological validity has not been confirmed. [provided by RefSeq, Jul 2008],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.





Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Ret antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: Mouse brain Predicted band size: 124kDa Observed band size: 175kDa

