Mouse Ret Alexa Fluor® 750-conjugated Antibody

Monoclonal Rat IgG_1 Clone # 64623

Catalog Number: FAB482S

100 µg

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Ret in direct ELISAs and Western blots. In direct ELISAs and Western blots, this antibody shows 10-50% cross-reactivity with recombinant human Ret.
Source	Monoclonal Rat IgG_1 Clone # 64623
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Ret Leu29-Arg637 Accession # P35546
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

The GDNF family of neurotrophic factors consititute a new family of factors within the TGF-β superfamily. These proteins are potent survival factors for various central and peripheral neurons during development and in the adult animal. The GDNF family members (GDNF, neurturin and persephin) signal through multicomponent receptors that consist of the Ret receptor tyrosine kinase and one of four glycosyl-phosphatidylinositol (GPI)-linked ligand-binding subunits (GFRα-1-4). GFRα-1, -2, and -4 are the preferred ligand-binding subunits for GDNF, neurturin and persephin, respectively. To date, the preferred ligand for GFRα-3 has not been identified. The Ret tyrosine-kinase receptor is encoded by the *c-ret* proto-oncogene. Mutations of the *ret* gene have been associated with various human diseases affecting tissues derived from the neural crest, including Hirschsprung's disease, multiple endocrine neoplasia MEN2A and MEN2B, and familial medullary thyroid carcinoma. Mouse Ret cDNA encodes a 1115 amino acid (aa) residue transmembrane tyrosine kinase with a 28 aa residue signal peptide, a 609 aa residue cysteine-rich extracellular domain and a 456 aa residue cytoplasmic domain. A cadherin-related sequence is also present in the extracellular domain of Ret. Human and mouse Ret share 83% amino acid sequence homology (77% homology in the extracellular domain and 93% homology in the cytoplasmic domain). Although Ret does not bind GDNF ligands directly, the extracellular domain of Ret binds the GDNF-GFR-α complex with high affinity and is a potent GDNF antagonist in the presence of soluble GFR-α.

PRODUCT SPECIFIC NOTICES

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