

### PRODUCT INFORMATION SHEET

# **Mouse Monoclonal Antibody to RET**

Format: PURE RUO REF IQP-1149P Volume: 0.1ml

**Description**  $\prod$ i

Clone 6E4C4

Mouse IgG1 **Isotype** 

**Specificity RET Alternative RET** 

names

**Species** 

Human

**Immunogen** 

Purified recombinant fragment of RET (aa896-1063) expressed in E. Coli.

Mw

**Format** Ascitic fluid containing 0.03% sodium azide.

### **Summary**

RET (ret proto-oncogene) is a member of the cadherin superfamily and a receptor tyrosine kinase, which are cell-surface molecules that transduce signals for cell growth and differentiation. It can undergo oncogenic activation in vivo and in vitro by cytogenetic rearrangement. Ligands that bind the Ret receptor include the glial cell line-derived neurotropic factor (GDNF) and its congeners neurturin, persephin and artemin. Alterations in the corresponding Ret gene are associated with diseases including papillary thyroid carcinoma, multiple endocrine neoplasia (type 2A and 2B), familial medullary thyroid carcinoma and a congenital developmental disorder known as Hirschsprung disease. The Tyr905 residue located in the Ret kinase domain plays a crucial role in Ret catalytic and biological activity. Substitution of Phe for Tyr905 dramatically inhibits Ret autophosphorylation activity.

## Applications

Western Bloting: 1/500 - 1/2000.ELISA: Propose dilution 1/10000.Not yet tested in other applications. Determining optimal working dilutions by titration test.

## Limitations

- 1. Conjugates with brighter fluorochromes, like PE and APC, will have a greater separation than those with dyes like FITC and CyQ. When populations overlap, the percentage of positive cells using a selected marker can be affected by the choice of fluorescent label.
- 2. Use of monoclonal antibodies in patient treatment can interfere with antigen target recognition by this reagent. This should be taken into account when samples are analyzed from patients treated in this fashion. IO Products has not characterized the effect of the presence of therapeutic antibodies on the performance of this reagent.
- 3. Reagents can be used in different combinations, therefore laboratories need to become familiar performance characteristics of each antibody in relation with the combined markers in normal and abnormal samples.
- 4. Reagent data performance is based on EDTA-treated blood. Reagent performance can be affected by the use of other anticoagulants.

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# **Handling and Storage**

Antibodies are supplied in 0.01 M sodium phosphate, 0.15 M NaCl; pH 7.3, 0.03% sodiumazide (NaN3) or as ascetic fluid containing 0.03% sodiumazide. Store the vials at 2-8 °C for a maximum of 2 weeks and store at -20°C for longer term storage. Monoclonal antibodies should be protected from prolonged exposure to light when conjugated with fluorochromes. Reagents are stable for the period shown on the vial label when stored properly.

#### Warranty

Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, which extend beyond the description on the label of the product. IQ Products is not liable for property damage, personal injury, or economic loss caused by the product.

# Characterization

To ensure consistently high-quality reagents, each batch of monoclonal antibody is tested for conformance with characteristics of a standard reagent. Representative flow cytometric data is included in this data sheet.

#### **Warning**

All products contain sodiumazide. This chemical is poisonous and hazardous. Handling should be done by trained staff only.

**References** 1. Young HM. Anderson RB. Anderson CR. Auton Neurosci. 2004, May 31,112(1-2):1-14. 2. Myers SM. Mulligan LM. Cancer Res. 2004, Jul 1,64(13):4453-63.

## **Explanation of used symbols**

Consult instructions for use

REF
Catalogue number
Sufficient for
Caution, consult accompanying document
Keep away from (sun)light
Biological risks
Temperature limitation (°C)
RUO
For Research Use Only

Batch code
Use by yyyy-mm-dd

Manufacturer
Authorized Representative in the European Communit

Conformité Européenne (European Conformity)

P F R C A	PURE FITC R-PE CyQ APC PerCP	Label - tandem purified material FITC PE PE-Cy5.18	Ex -max (nm) - 488 488, 532 488, 532 595, 633, 635, 647 488, 532	Em -max (nm) - 519 578 667 660 678
PCC	PerCP-Cy5.5		488, 532	695



EC REP

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