

PRODUCT INFORMATION SHEET

Mouse Monoclonal Antibody to CRTC1

Format: PURE RUO REF IQP-1437P Volume: 0.1ml



Description

| | |
|--------------------------|---|
| Clone | 1B5 |
| Isotype | Mouse IgG1 |
| Specificity | CRTC1 |
| Alternative names | MECT1; TORC1; WAMTP1; FLJ14027; KIAA0616; CRTC1 |
| Species | Human Purified recombinant fragment of human CRTC1 expressed in E. Coli. |
| Immunogen | |
| Mw | 67kDa |
| Format | Ascitic fluid containing 0.03% sodium azide. |

Summary MECT1 (also known as MucoEpidermoid Carcinoma Translocated 1) functions as a transcriptional coactivator for CREB1, which activates transcription through both consensus and variant cAMP response element (CRE) sites. MECT1 does not appear to modulate CREB1 DNA-binding activity but enhances the interaction of CREB1 with TAF4/TAFII-130. MECT1 translocates with MAML2 (MasterMind-Like Protein 2) to yield a fusion oncogene: t(11;19) (q21;p13). This translocation occurs in mucoepidermoid carcinomas, benign Warthin tumors and clear cell hidradenomas. The novel fusion product that results disrupts the Notch signaling pathway. The fusion protein consists of the N-terminus of MECT1 joined to the C-terminus of MAML2. The reciprocal fusion protein consisting of the N-terminus of MAML2 joined to the C-terminus of MECT1 has been detected in a small number of mucoepidermoid carcinomas. Multiple isoforms have been reported for the MECT1 protein. Tissue specificity: Highly expressed in adult and fetal brain. Located to specific regions such as the prefrontal cortex and cerebellum. Very low expression in other tissues such as heart, spleen, lung, skeletal muscle, salivary gland, ovary and kidney.

Applications Western Blotting: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. Flow cytometry: 1/200 - 1/400. 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. IQ 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.



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. Genes Chromosomes Cancer. 2007 Jun;46(6):559-63.
 2. Cancer Genet Cytogenet. 2008 Jan 15;180(2):135-9.
 3. Biosci Rep. 2009 Apr;29(2):77-87.

Explanation of used symbols



REF

Consult instructions for use

Catalogue number



Sufficient for



Caution, consult accompanying document



Keep away from (sun)light



Biological risks



Temperature limitation (°C)

RUO

For Research Use Only

LOT

Batch code



Use by yyyy-mm-dd



Manufacturer

EC/REP

Authorized Representative in the European Community



Conformité Européenne (European Conformity)

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



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