

## PRODUCT INFORMATION SHEET

## **Mouse Monoclonal Antibody to MTHFR**

Format: PURE RUO REF IQP-1572P Volume: 0.1ml

**Description**  $\prod$ i

Clone 5D3

Mouse IgG1 **Isotype Specificity MTHFR** 

**Alternative** names

**Immunogen** 

**MTHFR** 

**Species** Human, Rat

Purified recombinant fragment of human MTHFR expressed in E. Coli.

75kDa

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

**Summary** 

The protein encoded by this gene catalyzes the conversion of 5,10-methylenetetrahydrofolate to 5-methyltetrahydrofolate, a co-substrate for homocysteine remethylation to methionine. Genetic variation in this gene influences susceptibility to occlusive vascular disease, neural tube defects, colon cancer and acute leukemia, and mutations in this gene are associated with methylenetetrahydrofolate reductase deficiency.

Applications Western Bloting: 1/500 - 1/2000.Immunohistochemistry: 1/200 - 1/1000.ELISA: Propose dilution 1/10000. Not yet tested in other applications. Determining optimal working dilutions by titration

### 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.

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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. Kardiol Pol. 2008 Dec;66(12):1269-77. 2. Arg Bras Endocrinol Metabol. 2008 Nov;52(8):1374-81.

### **Explanation of used symbols**

Consult instructions for use REF Catalogue number Sufficient for

Δ Caution, consult accompanying document \*

Keep away from (sun)light

8 Biological risks

Temperature limitation (°C)

RUO For Research Use Only LOT

Batch code

Use by yyyy-mm-dd Manufacturer

Authorized Representative in the European Communit

Conformité Européenne (European Conformity)

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



EC REP

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