

PRODUCT INFORMATION SHEET

Mouse Monoclonal Antibody to TUBB3

Format: PURE RUO REF IQP-1356P Volume: 0.1ml



Description

Clone	2E9
Isotype	Mouse IgG1
Specificity	TUBB3
Alternative names	tubulin, beta 3; MC1R; TUBB4
Species	Human
Immunogen	Purified recombinant fragment of human TUBB3 expressed in E. Coli.
Mw	50kDa
Format	Ascitic fluid containing 0.03% sodium azide.

Summary Tubulin, beta 3, also known as TUBB3. Tubulin is the major constituent of microtubules. It binds two moles of GTP, one at an exchangeable site on the beta chain and one at a non exchangeable site on the alpha-chain. Tubulin is a highly conserved protein with a molecular weight of ~50 kD. Microtubules play key roles in chromosome segregation in mitosis, intracellular transport, ciliary and flagellar bending, and structural support of the cytoskeleton. The two main tubulin isoforms, α - and β -tubulin, are usually products of separate genes. The β -tubulin family includes six expressed genes that produce the polypeptide isoforms known as Classes I through VI, each of which have a distinct pattern of expression. Class III β -tubulin is found in neurons and mammalian testis cells and is widely used as a neuronal marker in developmental neurobiology, neoplasia, and stem cell research. Class III β -tubulin expression in neuronal and neuroblastic tumors is differentiation dependent, and its expression in certain non-neuronal neoplasms has been associated with poor prognosis and/or resistance to chemotherapy.

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. Histopathology. 2007 Jun;50(7):949-52.
 2. Neurochem Res. 2007 Aug;32(8):1387-98.
 3. Exp Eye Res. 1995 Apr;60(4):385-400.

Explanation of used symbols



REF



RUO

LOT



EC REP



Consult instructions for use

Catalogue number

Sufficient for

Caution, consult accompanying document

Keep away from (sun)light

Biological risks

Temperature limitation (°C)

For Research Use Only

Batch code

Use by yyyy-mm-dd

Manufacturer

Authorized Representative in the European Community

Conformité Européenne (European Conformity)



IQ Products
bright fluorescence

		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



IQ Products BV
Rozenburglaan 13a
9727 DL Groningen, The Netherlands

- +31 (0)50 57 57 000
- +31 (0)50 57 57 002
- Technical marketing@iqproducts.nl
- Orders orders@iqproducts.nl
- www.iqproducts.nl