

PRODUCT INFORMATION SHEET

Mouse Monoclonal Antibody to PTEN

Format: PURE RUO REF IQP-1329P Volume: 0.1ml

 Description	
Clone	1B8
Isotype	Mouse IgG1
Specificity	PTEN
Alternative names	BZS; MHAM; TEP1; PTEN1
Species	Human, Mouse
Immunogen	Purified recombinant fragment of PTEN expressed in E. Coli.
Mw	54kDa
Format	Antibody is purified by protein G affinity chromatography. Liquid in PBS containing 50% glycerol and 0.03% sodium azide.
Summary	PTEN (phosphatase and tensin homolog) was identified as a tumor suppressor that is mutated in a large number of cancers at high frequency. This protein is a phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase. It contains a tensin like domain as well as a catalytic domain similar to that of the dual specificity protein tyrosine phosphatases. Unlike most of the protein tyrosine phosphatases, this protein preferentially dephosphorylates phosphoinositide substrates. It negatively regulates intracellular levels of phosphatidylinositol-3,4,5-trisphosphate in cells and functions as a tumor suppressor by negatively regulating AKT/PKB signaling pathway.
Applications	Western Blotting: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000. Not yet tested in other applications. Determine optimal working dilutions by titration test.
Limitations	<ol style="list-style-type: none">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

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.

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

References

1. Nat Genet. 1998 Aug;19(4):348-55.
2. Oncogene. 1999 May 20;18(20):3181-5.
3. Eur J Immunol. 2002 Apr;32(4):1196-204.

Explanation of used symbols

	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

		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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