

## PRODUCT INFORMATION SHEET

### Mouse Monoclonal Antibody to TNF-alpha

Format: PURE      RUO      REF      IQP-1142P      Volume: 0.1ml

 Description	
<b>Clone</b>	2A9B9
<b>Isotype</b>	Mouse IgG1
<b>Specificity</b>	TNF-alpha
<b>Alternative names</b>	DIF; TNFA; TNFSF2; TNF-alpha
<b>Species</b>	Human
<b>Immunogen</b>	Recombinant Human TNF-alpha (BioSource company, Cat.No. PHC3013)
<b>Mw</b>	
<b>Format</b>	Purified antibody in PBS containing 0.03% sodium azide.
<b>Summary</b>	TNF-alpha (tumor necrosis factor alpha) is an important cytokine produced by numerous cell types including neutrophils, activated lymphocytes, macrophages and NK cells. It plays a critical role in inflammatory responses and in apoptosis. TNF-alpha is believed to mediate pathogenic shock and tissue injury associated with endotoxemia. TNF-alpha exists as a multimer of two, three, or five non covalently linked units, but shows a single 17 kDa band following SDS PAGE under non reducing conditions. Although it has little effect on many cultured normal human cells, TNF-alpha appears to be directly toxic to vascular endothelial cells. Other actions of TNF-alpha include stimulating growth of human fibroblasts and other cell lines, activating polymorphonuclear neutrophils and osteoclasts, and induction of interleukin 1, prostaglandin E2 and collagenase production. TNF-alpha is currently being evaluated in treatment of certain cancers and AIDS Related Complex.
<b>Applications</b>	Western Blotting: 1/500 - 1/2000.ELISA: Propose dilution 1/10000.Not yet tested in other applications.Determining optimal working dilutions by titration test.
<b>Limitations</b>	<ol style="list-style-type: none"><li>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.</li><li>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.</li><li>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.</li><li>4. Reagent data performance is based on EDTA-treated blood. Reagent performance can be affected by the use of other anticoagulants.</li></ol>



### Handling and Storage

Antibodies are supplied in 0.01 M sodium phosphate, 0.15 M NaCl; pH 7.3, 0.03% sodiumazide (NaN<sub>3</sub>) 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. Knowlton KU. Yajima T. J Am Coll Cardiol. 2004,Sep 15, 44(6):1298-300.
  2. Reynolds JL. Ignatowski TA. Gallant S.et al. Brain Res. 2004,Oct 8, 1023(1):112-20.
  3. Dulak J. Tomala K. Loboda A. et al. Life Sci. 2004,Oct 8, 75(21):2573-86.

### 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



Authorized Representative in the European Community



Conformité Européenne (European Conformity)

 **Products**  
bright fluorescence

		<b>Label - tandem</b>	<b>Ex -max (nm)</b>	<b>Em -max (nm)</b>
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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