

PRODUCT INFORMATION SHEET

Mouse Monoclonal Antibody to STAT3

Format: PURE RUO REF IQP-1490P Volume: 0.1ml

 Description	
Clone	3B5
Isotype	Mouse IgG1
Specificity	STAT3
Alternative names	APRF; HIES; FLJ20882; MGC16063; STAT3
Species	Human, Mouse & Monkey
Immunogen	Purified recombinant fragment of human STAT3 expressed in E. Coli.
Mw	88kDa
Format	Ascitic fluid containing 0.03% sodium azide.
Summary	<p>The Stat3 transcription factor is an important signaling molecule for many cytokines and growth-factor receptors and is required for murine fetal development . Stat3 is constitutively activated in a number of human tumors and possesses oncogenic potential and anti-apoptotic activities. Stat3 is activated by phosphorylation at Tyr705, which induces dimerization, nuclear translocation and DNA binding. Transcriptional activation seems to be regulated by phosphorylation at Ser727 through the MAPK or mTOR pathways. Stat3 isoform expression appears to reflect biological function as the relative expression levels of Stat3α (86 kDa) and Stat3β (79 kDa) depend on cell type, ligand exposure or cell maturation stage. It is notable that Stat3β lacks the serine phosphorylation site within the carboxy-terminal transcriptional activation domain. Tissue specificity: Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.</p>
Applications	<p>Western Blotting: 1/500 - 1/2000. Immunohistochemistry: 1/200 - 1/1000. Immunofluorescence: 1/200 - 1/1000. ELISA: Propose dilution 1/10000. Not yet tested in other applications. Determining optimal working dilutions by titration test.</p>
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

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.

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- References** 1. J Mol Graph Model. 2009 Nov;28(4):347-56.
2. Bone. 2010 Feb;46(2):524-33.
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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)

		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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