

PRODUCT INFORMATION SHEET

Mouse Monoclonal Antibody to ATM

Format: PURE RUO REF IQP-1540P Volume: 0.1ml



Description

| | |
|--------------------------|--|
| Clone | 5C5 |
| Isotype | Mouse IgG1 |
| Specificity | ATM |
| Alternative names | AT1; ATA; ATC; ATD; ATE; ATDC; TEL1; TELO1; MGC74674; DKFZp781A0353; ATM |
| Species | Human |
| Immunogen | Purified recombinant fragment of human ATM expressed in E. Coli. |
| Mw | 351kDa |
| Format | Ascitic fluid containing 0.03% sodium azide. |

Summary The protein encoded by this gene belongs to the PI3/PI4-kinase family. This protein is an important cell cycle checkpoint kinase that phosphorylates; thus, it functions as a regulator of a wide variety of downstream proteins, including tumor suppressor proteins p53 and BRCA1, checkpoint kinase CHK2, checkpoint proteins RAD17 and RAD9, and DNA repair protein NBS1. This protein and the closely related kinase ATR are thought to be master controllers of cell cycle checkpoint signaling pathways that are required for cell response to DNA damage and for genome stability. Mutations in this gene are associated with ataxia telangiectasia, an autosomal recessive disorder. Tissue specificity: Found in pancreas, kidney, skeletal muscle, liver, lung, placenta, brain, heart, spleen, thymus, testis, ovary, small intestine, colon and leukocytes.

Applications Western Blotting: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications. Determine 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

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. Am J Hum Genet. 2008 Aug;83(2):243-53.
2. Mol Cell. 2008 Jul 25;31(2):167-77.

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 |



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