

PRODUCT INFORMATION SHEET

Mouse Monoclonal Antibody to MSH2

Format: PURE RUO REF IQP-1025P Volume: 0.1ml



Description

| | |
|--------------------------|---|
| Clone | 1B3 |
| Isotype | Mouse IgG1 |
| Specificity | MSH2 |
| Alternative names | FCC1; COCA1; HNPCC; LCFS2 |
| Species | Human, Monkey |
| Immunogen | Purified recombinant fragment of human MSH2 expressed in E. Coli. |
| Mw | 105kDa |
| Format | Ascitic fluid containing 0.03% sodium azide. |

Summary

MSH2 is a 100 kDa nuclear antigen and encodes a protein of 934 amino acids. The MSH2 gene is one of 4 known genes encoding proteins involved in the repair of mismatch nucleotides following DNA replication or repair. Mutations in the MSH2 gene contribute to the development of sporadic colorectal carcinoma. MSH2 mutations are responsible for 50% of inherited non-polyposis colorectal (HNPCC). The repair of mismatch DNA is essential to maintaining the integrity of genetic information over time. An alteration of microsatellite repeats is the result of slippage owing to strand misalignment during DNA replication and is referred to as microsatellite instability (MSI). These defects in DNA repair pathways have been related to human carcinogenesis. MSH-2 is involved in the initial cognition of mismatch nucleotides during the replication mismatch repair process.

Applications

Western Blotting: 1/500 - 1/2000. Immunohistochemistry: 1/200 - 1/1000. Immunofluorescence: 1/200 - 1/1000. 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 sodiumazide. This chemical is poisonous and hazardous. Handling should be done by trained staff only.

References

1. Papadopoulos, N. 1994. Science 263: 1625-1629.
2. Palombo, F. 1994. Nature 367:417-418.

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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