

## PRODUCT INFORMATION SHEET

### Mouse Monoclonal Antibody to PMS2

Format: PURE       RUO       REF      IQP-1837P       QTY      0.1mg



#### Description

**Clone** 6A12H9

**Isotype** Mouse IgG2b

**Specificity** PMS2

**Alternative names** MLH4; PMSL2; HNPCC4; PMS2CL

**Species** Human

**Immunogen** Purified recombinant fragment of human PMS2 (AA: 748-851) expressed in E. Coli.

**Mw** 95.8kDa

**Format** Purified antibody in PBS with 0.05% sodium azide

#### Summary

The protein encoded by this gene is a key component of the mismatch repair system that functions to correct DNA mismatches and small insertions and deletions that can occur during DNA replication and homologous recombination. This protein forms heterodimers with the gene product of the mutL homolog 1 (MLH1) gene to form the MutL-alpha heterodimer. The MutL-alpha heterodimer possesses an endonucleolytic activity that is activated following recognition of mismatches and insertion/deletion loops by the MutS-alpha and MutS-beta heterodimers, and is necessary for removal of the mismatched DNA. There is a DQHA(X)2E(X)4E motif found at the C-terminus of the protein encoded by this gene that forms part of the active site of the nuclease. Mutations in this gene have been associated with hereditary nonpolyposis colorectal cancer (HNPCC; also known as Lynch syndrome) and Turcot syndrome.

**Applications** WB:1/500 - 1/2000; FCM:1/200 - 1/400; ELISA:1/10000.

#### 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.












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### References

1. Gastroenterology. 2018 Sep;155(3):844-851.
2. Oncotarget. 2015 Jun 30;6(18):16341-51.

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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

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		<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



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](mailto:marketing@iqproducts.nl)
-  Orders [orders@iqproducts.nl](mailto:orders@iqproducts.nl)
-  [www.iqproducts.nl](http://www.iqproducts.nl)