

**Datasheet for 200-301-864****PMS2 Antibody****Overview**

|                      |                                                     |
|----------------------|-----------------------------------------------------|
| <b>Description:</b>  | Anti-PMS2 (MOUSE) Monoclonal Antibody - 200-301-864 |
| <b>Item No.:</b>     | 200-301-864                                         |
| <b>Size:</b>         | 100 µg                                              |
| <b>Applications:</b> | ELISA, WB                                           |
| <b>Reactivity:</b>   | Human                                               |
| <b>Host Species:</b> | Mouse                                               |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | PMS2 is a highly conserved nuclear protein involved in mismatch repair during DNA replication and has been identified to be composed as a heterodimer of PMS2 and MLH1. PMS is part of the BRCA1-associated genome surveillance complex (BASC), which contains BRCA1, MSH2, MSH6, MLH1, ATM, BLM, PMS2 and the RAD50-MRE11-NBS1 protein complex. This association could be a dynamic process changing throughout the cell cycle and within subnuclear domains. Defects in PMS2 are the cause of hereditary non-polyposis colorectal cancer type 4 (HNPCC4), Turcot syndrome (an autosomal dominant disorder characterized by malignant tumors of the brain associated with multiple colorectal adenomas) and supratentorial primitive neuroectodermal tumors with cafe-au-lait spots (SNTCL). The human PMS2 gene encodes an 862 aa, 96 kDa polypeptide. |
| <b>Synonyms:</b>     | mouse anti-PMS2 antibody, DNA mismatch repair gene homologue antibody, H_DJ0042M02.9 antibody, HNPCC4 antibody, PMS 2 antibody, PMS1 protein homolog 2 antibody, PMS2 postmeiotic segregation increased 2 antibody, PMS2CL antibody, PMSL2 antibody                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Host Species:</b> | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Clonality:</b>    | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Clone ID:</b>     | 1204                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Format:</b>       | IgG1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

**Target Details**

|                   |      |
|-------------------|------|
| <b>Gene Name:</b> | PMS2 |
|-------------------|------|

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| <b>Reactivity:</b>         | Human                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Immunogen Type:</b>     | Recombinant Protein                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Immunogen:</b>          | This protein A purified monoclonal antibody was produced by repeated immunizations with recombinant human PMS2 corresponding to the first 133 amino acid residues of the protein. The clone was produced using conventional hybridoma technology.                                                                                                                                                                                 |
| <b>Purity/Specificity:</b> | This is an protein A purified antibody from ascites fluid directed against PMS2-134 and reacts with full length version of PMS2 in human and hamster tissues. The epitope was putatively mapped to amino acids 58-81 of human PMS2. BLAST analysis indicates that this sequence is 100% identical for human, mouse, rat and chimpanzee. No specific information is available for reactivity with PMS2 protein from other sources. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">UniProtKB - P54278</a></li><li>• <a href="#">NCBI - P54278.2</a></li><li>• <a href="#">GeneID - 5395</a></li></ul>                                                                                                                                                                                                                                                            |

## Application Details

|                             |                                                                                                                                                                                                                                                                                                                                                                                   |
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| <b>Tested Applications:</b> | ELISA, WB                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Application Note:</b>    | Anti-PMS2 antibody has been tested for use in ELISA and western blotting. This product is suitable for immunoprecipitation. Specific conditions for western blotting reactivity should be optimized by the end user. Expect a band approximately 96 kDa in size corresponding to human PMS2 by western blotting in most cell lines and tissues as PMS2 is ubiquitously expressed. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                                                                                   |
| <b>ELISA:</b>               | 1:5,000 - 1:20,000                                                                                                                                                                                                                                                                                                                                                                |
| <b>WB:</b>                  | 1:500 - 1:2,000                                                                                                                                                                                                                                                                                                                                                                   |

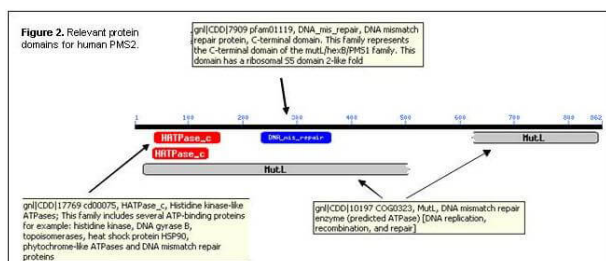
## Formulation

|                        |                                                            |
|------------------------|------------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                                  |
| <b>Concentration:</b>  | 1.0 mg/mL by UV absorbance at 280 nm                       |
| <b>Buffer:</b>         | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>   | 0.01% (w/v) Sodium Azide                                   |
| <b>Stabilizer:</b>     | None                                                       |

## Shipping & Handling

|                     |                                                                                                                                                                                                                                                                                                                                               |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shipping Condition: | Dry Ice                                                                                                                                                                                                                                                                                                                                       |
| Storage Condition:  | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |
| Expiration:         | Expiration date is one (1) year from date of receipt.                                                                                                                                                                                                                                                                                         |

## Images

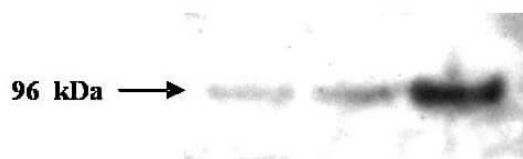


## Diagram

Relevant protein domains for human PMS2.

## Western Blot

Western blot analysis is shown using Rockland's Protein A Purified Mouse Monoclonal Anti-PMS2 antibody to detect human PMS2 protein present in H157 cell lysates. Approximately 5, 10 and 30 ug of cell lysate was loaded on a 4-12% NuPage SDS-PAGE gel using MES buffer. The blot was incubated with a 1:1,000 dilution of the antibody at room temperature followed by washing. A 1:20,000 dilution of HRP conjugated Gt-anti-Mouse IgG preceded color development using Pierce Chemical's SuperSignal™ substrate. Comparison to a molecular weight marker (not shown) indicates a single band of ~96.0 kDa corresponding to the expected molecular weight for human PMS2 protein. Other detection systems will yield similar results. Personal communication Morphotek Inc.



## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.