

# MSH2 (DNA Mismatch Repair Marker); Clone MSH2/6852 (Concentrate)

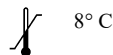
## Availability/Contents:

| <u>Item #</u> | <u>Volume</u> |
|---------------|---------------|
| RA1223-C.1    | 0.1 ml        |
| RA1223-C.5    | 0.5 ml        |
| RA1223-C1     | 1 ml          |

## Description:

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Species:                 | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Immunogen:               | Recombinant full-length human MSH2 protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Clone:                   | MSH2/6852                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Isotype:                 | IgG1 / Kappa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Entrez Gene ID:          | 4436                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Hu Chromosome Loc.:      | 2p21-p16.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Synonyms:                | DNA mismatch repair protein Msh2, MutS protein homolog 2, BAT26; COCA1; DNA mismatch repair protein Msh2; FCC1; hMSH2; HNPCC1; LCFS2; MSH2; MutS homolog 2; MutS homolog 2 colon cancer nonpolyposis type 1; MutS protein homolog 2                                                                                                                                                                                                                                                                                                                                                                                                            |
| Weight of Antigen:       | 100kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Format:                  | 200ug/ml of antibody purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Specificity:             | Recognizes a protein of 100kDa, identified as MSH2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Background:              | Mutations in DNA mismatch repair genes are associated with hereditary nonpolyposis colorectal cancer (HNPCC). Initially, inherited mutations in the MSH2 and MLH1 homologs of the bacterial DNA mismatch repair genes MutS and MutL were found at high frequency in HNPCC and were shown to be associated with microsatellite instability. The demonstration that 10 to 45% of pancreatic, gastric, breast, ovarian and small cell lung cancers also display microsatellite instability has been interpreted to suggest that DNA mismatch repair is not restricted to HNPCC tumors but is a common feature in tumor initiation or progression. |
| Species Reactivity:      | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Positive Control:        | A549 or HepG2 cells. Human colon, Testis or Lymph Node., Thyroid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Cellular Localization:   | Chromosome, Nucleus                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Titer/ Working Dilution: | Immunohistochemistry (Frozen and Formalin-fixed): 1-2µg/ml<br>Western Blot: 2-4µg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Microbiological State:   | This product is not sterile.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

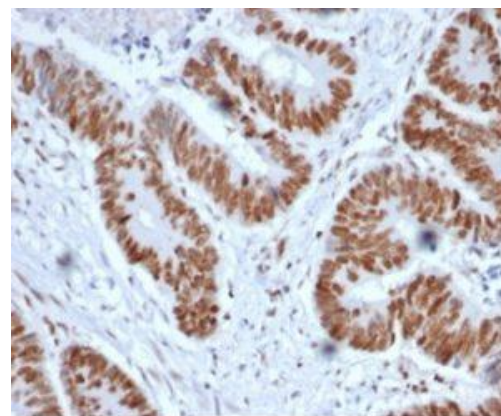
Storage: 2° C



 ScyTek Laboratories, Inc.  
 205 South 600 West  
 Logan, UT 84321  
 U.S.A.

**Uses/Limitations:**

- Not to be taken internally.
- For Research Use Only.
- This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.
- Do not use if reagent becomes cloudy.
- Do not use past expiration date.
- Non-Sterile.



Formalin-fixed, paraffin-embedded human colon stained with MSH2 Mouse Monoclonal Antibody (MSH2/6852).

**Ordering Information and Current Pricing at** [www.scytek.com](http://www.scytek.com)

### Procedure

- Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Tris-EDTA Solution (10x) pH 9.0 (ScyTek catalog# TES500) or Citrate Plus (10x) HIER Solution (ScyTek catalog# CPL500).
- Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
- Visualization:** For maximum staining intensity we recommend the “UltraTek HRP Anti-Polyvalent Lab Pack” (ScyTek catalog# UHP125, see IFU for instructions) combined with the “DAB Chromogen/Substrate Bulk Pack (High Contrast)” (ScyTek catalog# ACV500, see IFU for instructions).

**Precautions:**

- Contains Sodium Azide as a preservative (0.09% w/v).
- Do not pipette by mouth.
- Avoid contact of reagents and specimens with skin and mucous membranes.
- Avoid microbial contamination of reagents or increased nonspecific staining may occur.
- This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

### References:

- Palombo, F., et al. 1994. Mismatch repair and cancer. Nature 367: 417-418.

**Warranty:**

No products or “Instructions For Use (IFU)” are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

Storage: 2° C  8° C

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