



MSH6 (MutS homolog 6 protein); Clone EP49 (Ready-To-Use)

| Availability/Contents: | Item # | Volume |
|------------------------|-------------|--------|
| | A00149-0002 | 2 ml |
| | A00149-0007 | 7 ml |
| | A00149-0025 | 25 ml |

Description:


| | |
|-------------------------|---|
| Species: | Rabbit |
| Immunogen: | Rabbits were injected with a synthetic peptide corresponding to residues at the N-terminus in human MSH6 protein. |
| Mol. Weight: | Unkown |
| Clone: | EP49 |
| Isotype: | Rabbit IgG |
| Format: | This antibody has been pretitered and quality controlled to work on formalin-fixed paraffin-embedded as well as acetone fixed cryostat tissue sections. No further titration is required. |
| Specificity: | MSH6 is restricted to nuclear staining in positive cells. |
| Background: | <p>The MutS homolog 6 protein (MSH6) is a member of the MutS homolog family of proteins that are involved in the DNA mismatch repair system. In the human genome, hMSH6 is located on chromosome 2. It contains the Walker-A/B adenine nucleotide binding motif, which is the most highly conserved sequence found in all MutS homologs. Mismatches commonly occur as a result of DNA replication errors, genetic recombination, or other chemical and physical factors. Recognizing those mismatches and repairing them is extremely important for cells because failure to do so results in microsatellite instability, an elevated spontaneous mutation rate (mutator phenotype), and susceptibility to HNPCC. hMSH6 combines with hMSH2 to form the active protein complex, hMutS alpha, also called hMSH2-hMSH6.</p> <p>Carriers of the mismatch repair gene mutations have a high lifetime risk of developing Hereditary Non-Polyposis Colon Cancer (HNPCC) and several other cancers including endometrial cancer due to microsatellite instability (MSI) caused by accumulation of DNA replication errors in proliferating cells. Mutations in hMSH6 are linked to an atypical form of HNPCC. The penetrance of colorectal cancer seems to be lower in these mutations, meaning that a low proportion of hMSH6 mutation carriers present with the disease.</p> <p>The MSH6 antibody is useful for screening and diagnosis of patients with MSI. The level of MSI has been reported to be associated with prognosis in colon cancer.</p> |
| Species Reactivity: | Human |
| Positive Control: | Colon for normal tissue and colon adenocarcinoma for abnormal tissue. |
| Cellular Localization: | Nuclear |
| Titer/Working Dilution: | No further dilution is required. |
| Microbiological State: | This product is not sterile. |

Storage: 2° C  8° C

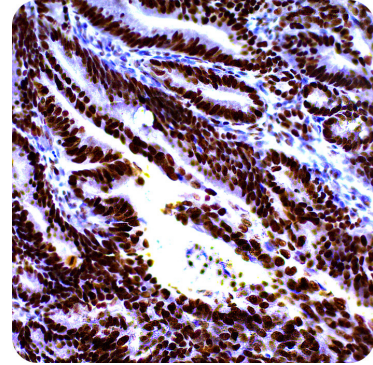


ScyTek Laboratories, Inc.
205 South 600 West
Logan, UT 84321
U.S.A.

 IVD

 EmergoEurope (31)(0) 70 345-8570
Molsnstraat 15
2513 BH Hague, The Netherlands

Uses/Limitations: Not to be taken internally.
 For In Vitro Diagnostic Use.
 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.



Human Colorectal Carcinoma stained with UltraTek HRP and DAB Chromogen.

Ordering Information and Current Pricing at www.scytek.com

Procedure:


1. **Tissue Section Pretreatment:** Staining of formalin fixed, paraffin embedded tissue sections is enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500) or 10mM citrate buffer, pH 6.0 (ScyTek Catalog# CBB500, see IFU for instructions).
2. **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.
3. **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:


1. Offit K: *J Clin Oncol* 2004, 22:4449-4451.
2. Shia J, et al.: *Am J Surg Pathol* 2005, 29:96-104.
3. Shia J, et al.: *Am J Surg Pathol* 2009, 33:1639-1645.
4. Berends MJ, et al.: *Am J Hum Genet* 2002, 70:26-37.
5. Caldes T, et al.: *Oncol Rep* 2004, 12:621-629.
6. Kets CM, et al.: *Mod Pathol* 2006, 19:1624-1630.

Note: MSH6 bearing EP Clone EP49 is manufactured using Epitomic’s RabMAb® technology under U.S. Patent Nos. 5,675,063 and 7,402,409.

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Warranty:


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