



Rev: A  
Release Date: 03/13/2014  
IVD

## MSH6 (EP49)

Clone	EP49
Source	Rabbit Monoclonal
Cat #	PR056-6ml RTU PR056-3ml RTU CR056-0.5ml Concentrated CR056-0.1ml Concentrated
Regulatory Status	IVD

### Intended Use:

This antibody is intended for use to qualitatively identify specific antigen by light microscopy in formalin fixed, paraffin embedded tissue sections using immunohistochemical detection methodology. Interpretation of any positive or negative staining must be complemented with the evaluation of proper controls and must be made within the context of the patient's clinical history and other diagnostic tests. A qualified pathologist must perform evaluation of the test.

### Summary and Explanation:

The MutS homologue 6 protein (MSH6) is a member of the MutS homolog family required in the DNA mismatch repair system. 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. 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.

**Immunogen:** A synthetic peptide corresponding to residues at the N-terminus in human MSH6 protein.

**Isotype:** Rabbit IgG

### Reagent Provided:

**Concentrated format:** Antibody to MSH6 is affinity purified and diluted in antibody diluent, with 1% bovine serum albumin (BSA) and 0.05% sodium azide (NaN<sub>3</sub>).  
Recommended dilutions: 1:50 – 1:100.

The antibody dilution and protocol may vary depending on the specimen preparation and specific application. Optimal conditions should be determined by individual laboratory.

**Pre-diluted format:** PathnSitu ready to use antibodies are pre titrated to optimal staining conditions. Further dilution may lose the activity and may yield to sub optimal staining conditions.

**Storage Recommendations:** Store at 2°-8°C. Do not use after expiration date provided on the vial.

**Staining Recommendations:**

**Antigen Retrieval Solution:** Use Citrate Buffer (PathnSitu cat#) as antigen retrieval solution  
Heat Retrieval Method: Retrieve sections under steam pressure for 15 min using PathnSitu's MERS (Multi Epitope Retrieval System) then allow solution to cool for 10 minutes then transfer tissue sections/slides to distilled water.

**Primary Antibody:** Cover the tissue sections with primary antibody and incubate for 30 min at room temperature when used PathnSitu PolyExcel Detection System.

**Detection System:** Refer to PathnSitu PolyExcel detection system protocol or manufacturer's detection kit staining protocol when used other vendor detection system.

**Cellular Localization:** Nucleus

**Positive Control:** Colon or Breast carcinoma

**Troubleshooting:** Follow the antibody specific protocol recommendations according to data sheet provided. If unusual results occur, contact PathnSitu Technical Support at 040-2701 5544 or techsupport@pathnsitu.com.

**Limitations and Warranty:** There are no warranties, expressed or implied, which extend beyond this description. PathnSitu is not liable for property damage, personal injury, or economic loss caused by this product.

**Bibliography:**

1. Offit K: *J ClinOncol*2004, 22:4449-4451
2. Shia J, *et al.*: *Am J SurgPathol*2005, 29:96-104
3. Shia J, *et al.*: *Am J SurgPathol*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

MSH6, EP49 antibody has been created by Epitomics Inc., using Epitomics' proprietary rabbit monoclonal antibody technology covered under Patent No.'s 5,675,063 and 7,402,409.