

MSH2 (Mismatch Repair Protein 2) Ab-1

Catalog # MS-1498-S0, -S1, or -S (0.1ml, 0.5ml, or 1.0ml)

Catalog # MS-1498-R7 (7.0ml)

Catalog # MS-1498-RQ (12.0ml)

Catalog # MS-1498-PCS

Please note this data sheet has been changed effective December 12, 2011

INTENDED USE:

- **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.
- **Description:** Germline mutations in human mismatch repair genes (hMSH2, hMSH6, hMLH1, hPMS2) account for majority of the hereditary non-polyposis colorectal carcinoma (HPNCC). CpG dinucleotides in the hMSH2 and hMLH1 genes are hotspots for HNPCC mutations. These mutations cause a mismatch repair deficiency resulting in a mutator phenotype where the replication errors are not repaired. Microsatellites / simple repetitive sequences are prone to this type of replication errors and instability of these microsatellites correlates with the occurrence of HPNCC. hMSH2 binds to another MutS homolog protein GTBP to form a heterodimeric complex called hMutSbeta, which binds to insertion/deletion loops in DNA.
- **Expected Staining Pattern:** Nuclear
- **Positive Control:** Tonsil.

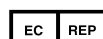
MATERIALS PROVIDED:

MSH2 (Mismatch Repair Protein 2) Ab-1 (refer to catalog number):

- #MS-1498-S (or -S0, -S1): Tissue culture supernatant, concentrated, with 0.09% Sodium Azide.
or
- #MS-1498-R7: (7.0ml) of antibody prediluted in 0.05mol/L Tris-HCl, pH 7.6 containing stabilizing protein and 0.015mol/L sodium azide.
or
- #MS-1498-RQ: (12.0ml) of antibody prediluted in 0.025mol/L Tris-HCl, pH 7.4 ±0.1 containing stabilizing protein and 0.015mol/L sodium azide.
or
- #MS-1498-PCS: 5 positive control slides.
- **Antibody Concentration:** Not known
- **Host:** Mouse
- **Mol. Wt. of Antigen:** ~102kDa
- **Species Reactivity:** Human. Others-not tested.
- **Clone Designation:** 25D12
- **Ig Isotype / Light Chain:** IgG1 / kappa
- **Immunogen:** Recombinant human MSH2 protein.
- **Microbiological State:** This product is not sterile.

MATERIALS REQUIRED, BUT NOT PROVIDED:

- **Antibody Diluent:** For concentrated antibodies, the antibody must be diluted before using. Use Lab Vision Antibody Diluent (catalog # TA-125-UD). Refer to diluent product instructions for use.
- **Negative Control Reagent:** Refer to the "General Protocol" instructions.
- **Visualization System:** Refer to the "General Protocol" instructions.



MSH2 (Mismatch Repair Protein 2) Ab-1

Catalog # MS-1498-S0, -S1, or -S (0.1ml, 0.5ml, or 1.0ml)

Catalog # MS-1498-R7 (7.0ml)

Catalog # MS-1498-RQ (12.0ml)

Catalog # MS-1498-PCS

Please note this data sheet has been changed effective December 12, 2011

METHODS AND PROCEDURES:

Using UltraVision LP Detection Systems	
Specimen Preparation	Refer to the "General Protocol" instructions.
Dilution of Concentrated Antibody	1:10 in antibody diluent
Tissue Section Pretreatment	Staining of formalin-fixed tissue sections requires treating the tissue sections in boiling 10mM citrate buffer, pH 6.0 (Lab Vision catalog # AP-9003), for 10-20 minutes followed by cooling at room temperature for 20 min.
Primary Antibody Incubation Time	60 min at RT using the UltraVision LP Detection System
Visualization	To detect antibody, follow the instructions provided with the visualization system.

Using UltraVision Quanto Detection Systems	
Specimen Preparation	Refer to the "General Protocol" instructions.
Dilution of Concentrated Antibody	1:10 in antibody diluent
Tissue Section Pretreatment	Staining of formalin-fixed tissue sections requires treating the tissue sections in boiling 10mM citrate buffer, pH 6.0 (Lab Vision catalog # AP-9003), for 10-20 minutes followed by cooling at room temperature for 20 min.
Primary Antibody Incubation Time	20 min at RT using the UltraVision Quanto Detection System
Visualization	To detect antibody, follow the instructions provided with the visualization system.

STORAGE and STABILITY:

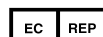
This product contains sodium azide and is stable for 24 months when stored at 2-8°C. Do not use after expiration date indicated on label of the product. If reagent is not stored as recommended, performance must be validated by the user.

REFERENCES:

- 1) Fishel R, et al. (1993) Cell 75: 1027-1038.
- 2) Kolodner r D, et al. (1994) Genomics 24:516-526.
- 3) Maliaka Y K, et al. (1996) Hum. Genet. 97: 251-255.
- 4) Palombo F, et al. (1996) Curr. Biol. 6:1181-1184.



Lab Vision Corporation
46360 Fremont Blvd.
Fremont, CA 94538-6406, USA
US Toll Free: 1 (800) 522-7270
Phone: +1 (269) 544-5600
Fax: +1 (269) 372-2674
www.thermoscientific.com/labvision



Thermo Fisher Scientific
Anatomical Pathology
Tudor Road, Manor Park
Runcorn, Cheshire WA7 1TA, UK
Tel: +44 (0) 1928 534 050
Fax: +44 (0) 1928 534 049
sales.ap.uk@thermofisher.com