Qty: 50 µg/100 µl
Mouse anti-MSH2
Catalog No. 33-7900
Lot No.

Mouse anti-MSH2

FORM
This monoclonal antibody is highly purified from mouse ascites by protein A chromatography. The antibody is supplied as a 100 µl aliquot at a concentration of 0.5 mg/ml in PBS, pH 7.4, containing 0.1% sodium azide.

CLONE: FE11 **ISOTYPE:** IgG_1-kappa

IMMUNOGEN
A carboxy-terminal fragment of the human MSH2 protein.

SPECIFICITY
This antibody reacts with the human and mouse MSH2 proteins (~100 kDa). The epitope recognized by this antibody is located in the carboxy terminal region of MSH2.

USAGE
This antibody is suitable for use with the applications listed below, although concentrations may not be given for all applications. Applications not listed have not been tested. Working concentrations for specific applications should be determined by the investigator. Appropriate dilutions will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. We recommend the following ranges as starting points for this product.

Application	Amount	Positive Control	Negative Control
Immunohistochemistry (frozen)(1)	2 µg/ml	colon tissue	
Immunohistochemistry (paraffin)(2) (staining of formalin fixed, paraffin embedded tissue requires HIER* pretreatment)	2 µg/ml	colon tissue	
Immunoprecipitation	1 µg/sample	HCT116 or SW480 cells	LoVo cells
Western Blotting(1) (chemiluminescence detection)	0.2 µg/ml	HCT116 or SW480 cells	LoVo cells

* HIER: Heat induced epitope retrival. Contact Invitrogen Technical Service for protocol

STORAGE
Store at 2-8°C for up to one month. Store at -20°C for long term storage. Avoid repeated freezing and thawing.

BACKGROUND
MSH2 is a protein of 934 aa (~100 kDa) localized to the cell nucleus. MSH2 functions as one of the four major DNA mismatch repair genes along with MLH1, PMS1 and PMS2. Somatic mutations in the human MSH2 gene contribute to the development of sporadic colorectal carcinomas while germline mutations are responsible for approximately 50% of inherited non-polyposis colorectal carcinomas (HNPCC).

(cont'd)

REFERENCES

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3. Bronner, C.E., et al., *Nature* 368:258-261 (1994).
4. Fishel, R., et al., *Cell* 75:1027-1028 (1993).
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8. Peltomäki, P.T., *Annals Med.* 26:215-219 (1994).

RELATED PRODUCTS

Product	***Conjugate***	***Catalog No.***
Goat anti-Mouse IgG (H+L)	purified	81-6500
(ZyMax™ Grade)	FITC	81-6511
	TRITC	81-6514
	Cy™3	81-6515
	Cy™5	81-6516
	HRP	81-6520
	AP	81-6522
	Biotin	81-6540
rec-Protein G	Sepharose® 4B	10-1241
Protein A	Sepharose® 4B	10-1041

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