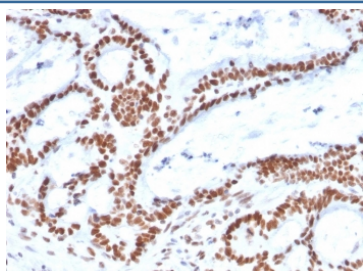


## MSH2 Antibody [clone MSH2/2622] (V7964)

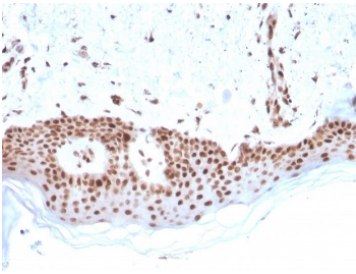
Catalog No.	Formulation	Size
V7964-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7964-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7964SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

**Bulk quote request**

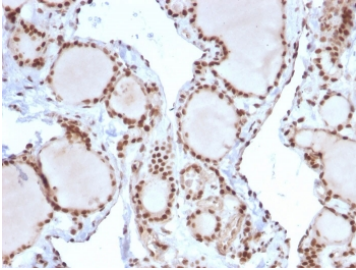
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Clonality</b>	Monoclonal (mouse origin)
<b>Isotype</b>	Mouse IgG1, kappa
<b>Clone Name</b>	MSH2/2622
<b>Purity</b>	Protein G affinity chromatography
<b>UniProt</b>	P43246
<b>Localization</b>	Nuclear
<b>Applications</b>	Flow Cytometry : 1-2ug/million cells in 0.1ml Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml Immunofluorescence : 1-2ug/ml
<b>Limitations</b>	This MSH2 antibody is available for research use only.



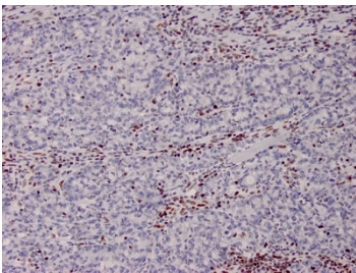
IHC staining of FFPE human colon carcinoma with MSH2 antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



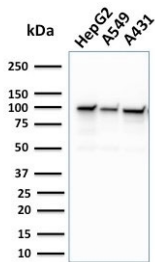
IHC staining of FFPE human basal cell carcinoma with MSH2 antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



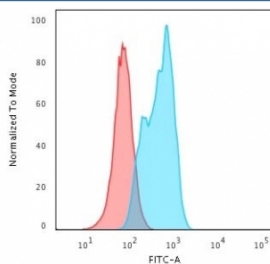
IHC staining of FFPE human thyroid carcinoma with MSH2 antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



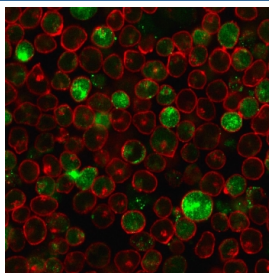
IHC staining of FFPE human colon from a Lynch disease patient with MSH2 antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



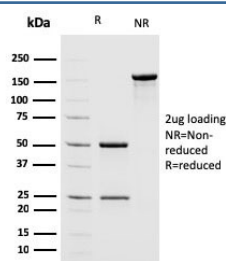
Western blot testing of human cell lysates with MSH2 antibody. Expected molecular weight: ~105 kDa.



Flow cytometry testing of permeabilized human A549 cells with MSH2 antibody; Red=isotype control, Blue= MSH2 antibody.



Immunofluorescent staining of permeabilized human MOLT-4 cells with MSH2 antibody (green) and Phalloidin (red).



SDS-PAGE analysis of purified, BSA-free MSH2 antibody as confirmation of integrity and purity.

## Description

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.

## Application Notes

Optimal dilution of the MSH2 antibody should be determined by the researcher.

## Immunogen

A recombinant human partial protein (amino acids 327-427) was used as the immunogen for this MSH2 antibody.

## Storage

Store the MSH2 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).