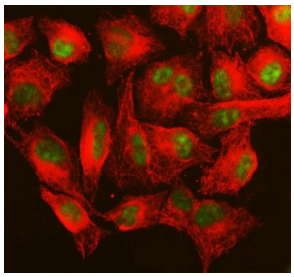
MSH6 Antibody / MutS homolog 6 (RQ5743)

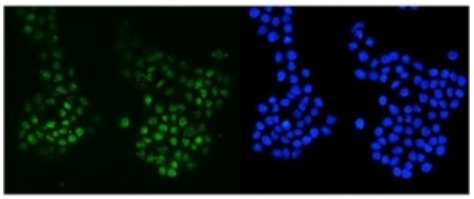
Catalog No.	Formulation	Size
RQ5743	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

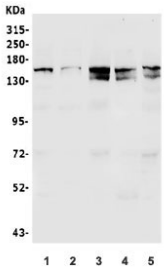
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P52701
Localization	Nuclear
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This MSH6 antibody is available for research use only.



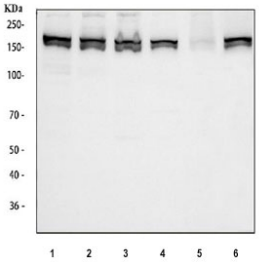
Immunofluorescent staining of FFPE human A549 cells with MSH6 antibody (green) and Alpha Tubulin mAb (red). HIER: steam section in pH6 citrate buffer for 20 min.



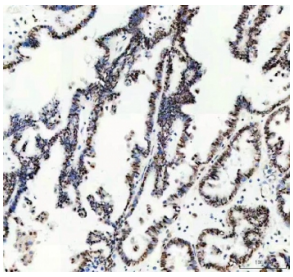
Immunofluorescent staining of FFPE human A431 cells with MSH6 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



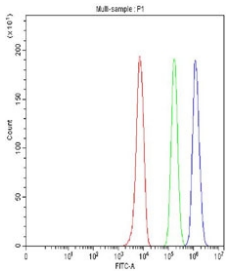
Western blot testing of human 1) HEK293, 2) HepG2, 3) SK-O-V3, 4) U-87 MG and 5) K562 lysate with MSH6 antibody. Expected molecular weight: 120-160 kDa depending on phosphorylation level.



Western blot testing of 1) human K562, 2) human HeLa, 3) human 293T, 4) human HepG2, 5) rat RH35 and 6) mouse NIH 3T3 cell lysate with MSH6 antibody. Expected molecular weight: 120-160 kDa depending on phosphorylation level.



IHC staining of FFPE human ovarian cancer tissue with MSH6 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Flow cytometry testing of fixed and permeabilized human HepG2 cells with MSH6 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= MSH6 antibody.

Description

MSH6 or mutS homolog 6 is a gene that codes for DNA mismatch repair protein Msh6 in the budding yeast Saccharomyces cerevisiae. This gene encodes a member of the DNA mismatch repair MutS family. In E. coli, the MutS protein helps in the recognition of mismatched nucleotides prior to their repair. A highly conserved region of approximately 150 aa, called the Walker-A adenine nucleotide binding motif, exists in MutS homologs. The encoded protein heterodimerizes with MSH2 to form a mismatch recognition complex that functions as a bidirectional molecular switch that exchanges ADP and ATP as DNA mismatches are bound and dissociated. Mutations in this gene may be associated with hereditary nonpolyposis colon cancer, colorectal cancer, and endometrial cancer. Transcripts variants encoding different isoforms have been described.

Application Notes

Optimal dilution of the MSH6 antibody should be determined by the researcher.

Immunogen

Amino acids KAREFEKMNQSLRLFREVCLA from the human protein were used as the immunogen for the MSH6 antibody.

Storage

After reconstitution, the MSH6 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.