

Rabbit anti-Human MSH6 Polyclonal Antibody | anti-MSH6 antibody

Anti-MSH6 Antibody

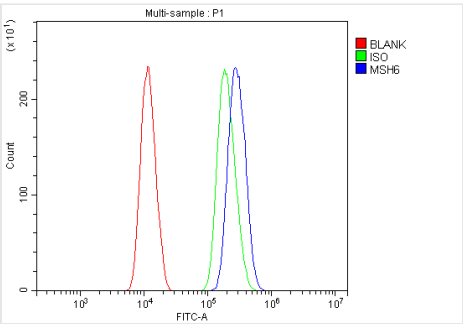
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125558	Rabbit	Human	Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

MSH6; Polyclonal Antibody; Anti-MSH6 Antibody; GTBP; DNA mismatch repair protein Msh6; hMSH6; G/T mismatch-binding protein; GTMBP; MutS protein homolog 6; MutS-alpha 160 kDa subunit; p160; mutS homolog 6; anti-MSH6 antibody

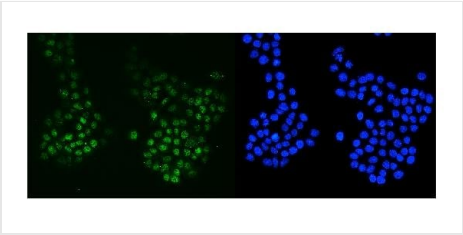
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for MSH6 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-MSH6 antibody	FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence of human MSH6 (KAREFEKMNQSLRLFREVCLA).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



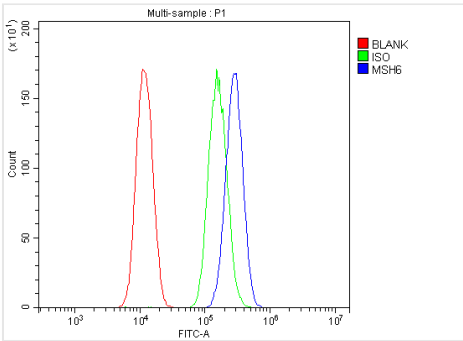
FCM/FACS (Flow Cytometry)

Figure 4. Flow Cytometry analysis of U2OS cells using anti-MSH6 antibody (AAA125558).Overlay histogram showing U2OS cells stained with AAA125558 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MSH6 Antibody (AAA125558,1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



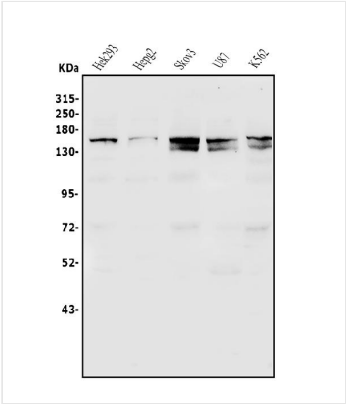
IF (Immunofluorescence)

Figure 2. IF analysis of MSH6 using anti-MSH6 antibody (AAA125558).MSH6 was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5μg/mL rabbit anti-MSH6 Antibody (AAA125558) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of A549 cells using anti-MSH6 antibody (AAA125558).Overlay histogram showing A549 cells stained with AAA125558 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MSH6 Antibody (AAA125558,1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)

Figure 1. Western blot analysis of MSH6 using anti-MSH6 antibody (AAA125558).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: human HEK293 whole cell lysatesLane 2: human HepG2 whole cell lysatesLane 3: human SKOV3 whole cell lysatesLane 4: human U87 whole cell lysatesLane 5: human K562 whole cell lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-MSH6 antigen affinity purified polyclonal antibody (Catalog # AAA125558) at 0. 5 μg/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for MSH6 at approximately 160KD. The expected band size for MSH6 is at 160KD.

ADDITIONAL INFORMATION

Related Product Information for anti-MSH6 antibody

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.

References	1. Kariola, R., Raevaara, T. E., Lonnqvist, K. E., Nystrom-Lahti, M. Functional analysis of MSH6 mutations linked to kindreds with putative hereditary non-polyposis colorectal cancer syndrome. Hum. Molec. Genet. 11: 1303-1310, 2002. 2. Verma, L., Kane, M. F., Brassett, C., Schmeits, J., Evans, D. G. R., Kolodner, R. D., Maher, E. R. Mononucleotide microsatellite instability and germline MSH6 mutation analysis in early onset colorectal cancer. J. Med. Genet. 36: 678-682, 1999.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4504191
NCBI GeneID	2956
NCBI Accession #	NP_000170.1
NCBI GenBank Nucleotide #	NM_000179.2
UniProt Accession #	P52701; O43706; O43917; Q8TCX4; Q9BTB5
Molecular Weight	1360
NCBI Official Full Name	DNA mismatch repair protein Msh6 isoform 1
NCBI Official Synonym Full Names	mutS homolog 6 (E. coli)
NCBI Official Symbol	MSH6
NCBI Official Synonym Symbols	GTBP; HSAP; p160; GTMBP; HNPCC5
NCBI Protein Information	DNA mismatch repair protein Msh6; sperm-associated protein; mutS-alpha 160 kDa subunit; G/T mismatch-binding protein
UniProt Protein Name	DNA mismatch repair protein Msh6
UniProt Gene Name	MSH6
UniProt Synonym Gene Names	GTBP; hMSH6; GTBP; GTMBP; p160
UniProt Entry Name	MSH6_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.