

Product Name: KD-Validated MutS Homolog 2 Mouse Monoclonal Antibody**Catalog #: KVA01200**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:400-1:2,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 104.7kDa

Antigen Information

Gene Name	MSH2 MSH2; MutS Homolog 2; DNA Mismatch Repair Protein Msh2; HNPCC1; HNPCC; MSH-2; COCA1; HMSH2; MutS (E. Coli) Homolog 2 (Colon Cancer, Nonpolyposis Type 1); MutS
Alternative Names	Homolog 2, Colon Cancer, Nonpolyposis Type 1 (E. Coli); MutS Homolog 2, Colon Cancer, Nonpolyposis Type 1; DNA Mismatch Repair Protein Msh2 Transcript; MutS Protein Homolog 2; MutS-Like 2; LYNCH1; MMRC2; LCFS2; FCC1
Gene ID	4436.0
SwissProt ID	P43246
Immunogen	Recombinant protein of human MSH2

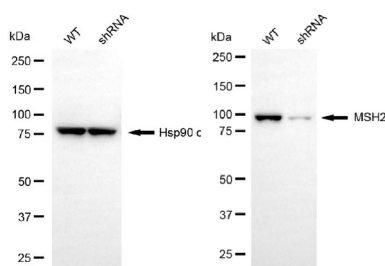
Background

This locus is frequently mutated in hereditary nonpolyposis colon cancer (HNPCC). When cloned, it was discovered to be a human homolog of the *E. coli* mismatch repair gene *mutS*, consistent with the characteristic alterations in microsatellite sequences (RER+ phenotype) found in HNPCC. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2012]

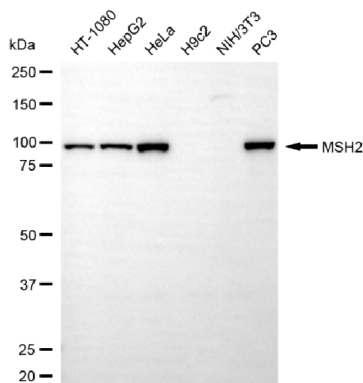
Research Area

Epigenetics and Nuclear Signaling, Cancer

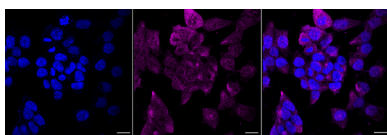
Image Data



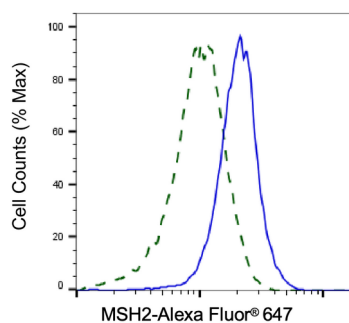
Western blotting analysis using MSH2 antibody (KVA01200). MSH2 expression in wild-type (WT) and MSH2 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with MSH2 antibody (KVA01200, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



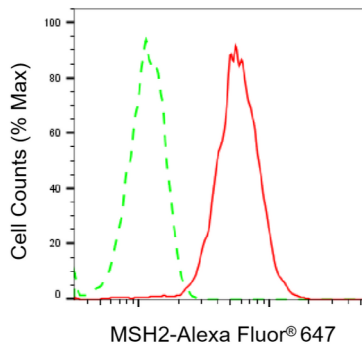
Western blotting analysis using MSH2 antibody (KVA01200). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with MSH2 antibody (KVA01200, 1:2,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Immunocytochemical staining of HAP-1 cells with MSH2 antibody (KVA01200, 1:1,000). Nuclei were stained blue with DAPI; MSH2 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and Smart Gain: Medium. Scale bar, 20 µm.



Validation of MSH2 knockdown using flow cytometry. Wild-type (WT, Blue) and knockdown (KD, Green) HeLa cells were stained with MSH2 antibody (KVA01200, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of MSH2 expression in HAP-1 cells using MSH2 antibody (KVA01200, 1:2,000). Green, isotype control; red, MSH2.