

## Affinity Biosciences website:www.affbiotech.com order:order@affbiotech.com

## MSH2 Ab

Cat.#: DF6257 Concn.: 1mg/ml Mol.Wt.: 105kDa Size: 100ul,200ul Source: Rabbit Clonality: Polyclonal

Application: WB 1:500-1:2000 IHC 1:50-1:200 IF 1:100-500

ELISA(peptide) 1:20000-1:40000

Reactivity: Human, Mouse, Rat

Purification: The antiserum was purified by peptide affinity

chromatography using SulfoLink™ Coupling Resin (Thermo

Fisher Scientific).

Specificity: MSH2 Ab detects endogenous levels of total MSH2.

Immunogen: A synthesized peptide derived from human MSH2.

Uniprot: P43246

Description: The DNA mismatch repair system (MMR) repairs post-

replication DNA, inhibits recombination between non-identical DNA sequences and induces both checkpoint and apoptotic responses following certain types of DNA damage (1). MSH2 (MutS homologue 2) forms the hMutS- $\alpha$  dimer with MSH6 and is an essential component of the mismatch repair

process. hMutS- $\alpha$  is part of the BRCA1-associated

surveillance complex (BASC), a complex that also contains

BRCA1, MLH1, ATM, BLM, PMS2 proteins and the

Rad50-Mre11-NBS1 complex (2).Mutations in MSH2 have been found in a large proportion of hereditary non-polyposis colorectal cancer (Lynch Syndrome), the most common form of inherited colorectal cancer in the Western world (3). Mutations have also been associated with other sporadic

tumors.

Subcellular Location: Nucleus.

Tissue Specificity: Ubiquitously expressed.

Similarity: Belongs to the DNA mismatch repair MutS family.

Storage Condition and

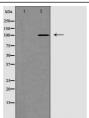
Buffer:

Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20

°C.Stable for 12 months from date of receipt.



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Western blot analysis of Hela whole cell lysates, using MSH2 Ab. The lane on the left was treated with the antigen-specific peptide.



DF6257 at 1/100 staining Mouse colon tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the Ab for 1.5 hours at  $22^{\circ}$ C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.



DF6257 staining HeLa cells by ICC/IF. Cells were fixed with PFA and permeabilized in 0.1% saponin prior to blocking in 10% serum for 45 minutes at 37°C. The primary Ab was diluted 1/200 and incubated with the sample for 1 hour at 37°C. A Alexa Fluor 594 conjugated goat polyclonal to rabbit IgG (H+L), diluted 1/600 was used as secondary Ab.

<code>IMPORTANT:</code> For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween@20 at 4°C with gentle shaking, overnight.

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