

## MSH6 Ab

Cat.#: DF6165  
Size: 100ul,200ul

Concn.: 1mg/ml  
Source: Rabbit

Mol.Wt.: 153kDa  
Clonality: Polyclonal

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

Reactivity: Human, Mouse, Rat

Purification: The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

Specificity: MSH6 Ab detects endogenous levels of total MSH6.

Immunogen: A synthesized peptide derived from human MSH6.

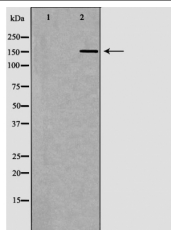
Uniprot: P52701

Description: The DNA mismatch repair system (MMR) repairs post-replication DNA, inhibits recombination between nonidentical 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 MSH6 and other MMR proteins have been found in a large proportion of hereditary nonpolyposis colorectal cancer (Lynch Syndrome), the most common form of inherited colorectal cancer in the Western world (3). Mutations in MSH6 have been shown to occur in glioblastoma in response to temozolomide therapy and to promote temozolomide resistance (4).

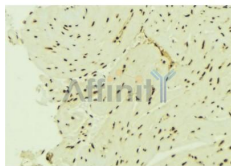
Subcellular Location: Nucleus.

Similarity: The PWWP domain specifically recognizes and binds trimethylated 'Lys-36' of histone H3 (H3K36me3). Belongs to the DNA mismatch repair MutS family.

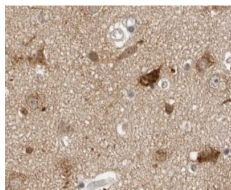
Storage Condition and Buffer: Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at -20 °C. Stable for 12 months from date of receipt.



Western blot analysis of Hela whole cell lysates, using MSH6 Ab. The lane on the left was treated with the antigen-specific peptide.



DF6165 at 1/100 staining Mouse brain 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°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.



DF6165 at 1/100 staining human brain tissues sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the Ab for 1.5 hours at 74°C



DF6165 staining HuvEc cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. The primary Ab was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab(Red), diluted at 1/600, was used as secondary Ab.

**IMPORTANT:** 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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