

Datasheet for ABIN704366
anti-MSH6 antibody (AA 812-910)



[Go to Product page](#)

1 Image

Overview

Quantity:	100 µL
Target:	MSH6
Binding Specificity:	AA 812-910
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MSH6 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human MSH6
Isotype:	IgG
Cross-Reactivity:	Human, Rat
Predicted Reactivity:	Mouse,Dog,Cow,Sheep,Pig,Rabbit
Purification:	Purified by Protein A.

Target Details

Target:	MSH6
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Target Details

Alternative Name: MSH6 ([MSH6 Products](#))

Background: Synonyms: GTBP, HSAP, p160, GTMBP, HNPCC5, DNA mismatch repair protein Msh6, hMSH6, G/T mismatch-binding protein, MutS-alpha 160 kDa subunit, MSH6

Background: Component of the post-replicative DNA mismatch repair system (MMR). Heterodimerizes with MSH2 to form MutS alpha, which binds to DNA mismatches thereby initiating DNA repair. When bound, MutS alpha bends the DNA helix and shields approximately 20 base pairs, and recognizes single base mismatches and dinucleotide insertion-deletion loops (IDL) in the DNA. After mismatch binding, forms a ternary complex with the MutL alpha heterodimer, which is thought to be responsible for directing the downstream MMR events, including strand discrimination, excision, and resynthesis. ATP binding and hydrolysis play a pivotal role in mismatch repair functions. The ATPase activity associated with MutS alpha regulates binding similar to a molecular switch: mismatched DNA provokes ADP \rightarrow ATP exchange, resulting in a discernible conformational transition that converts MutS alpha into a sliding clamp capable of hydrolysis-independent diffusion along the DNA backbone. This transition is crucial for mismatch repair. MutS alpha may also play a role in DNA homologous recombination repair. Recruited on chromatin in G1 and early S phase via its PWWP domain that specifically binds trimethylated 'Lys-36' of histone H3 (H3K36me3): early recruitment to chromatin to be replicated allowing a quick identification of mismatch repair to initiate the DNA mismatch repair reaction.

Gene ID: 2956

UniProt: [P52701](#)

Pathways: [DNA Damage Repair](#), [Chromatin Binding](#), [Production of Molecular Mediator of Immune Response](#)

Application Details

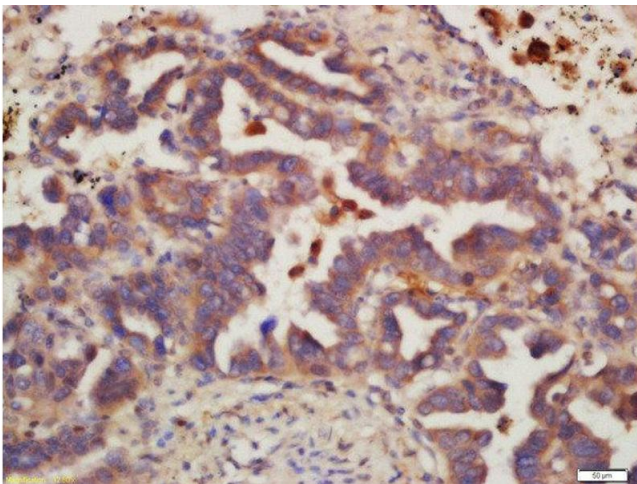
Application Notes: WB 1:300-5000
ELISA 1:500-1000
IHC-P 1:200-400
IHC-F 1:100-500
IF(IHC-P) 1:50-200
IF(IHC-F) 1:50-200
IF(ICC) 1:50-200

Restrictions: For Research Use only

Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Images



Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Formalin-fixed and paraffin embedded human lung carcinoma labeled with Rabbit Anti-MSH6 Polyclonal Antibody, Unconjugated 1:200 followed by conjugation to the secondary antibody and DAB staining