

Anti-MSH3 Picoband Antibody
Catalog # ABO11976**Specification**

Anti-MSH3 Picoband Antibody - Product Information

Application	WB
Primary Accession	P20585
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for DNA mismatch repair protein Msh3(MSH3) detection. Tested with WB in Human;Mouse.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-MSH3 Picoband Antibody - Additional Information

Gene ID 4437

Other Names

DNA mismatch repair protein Msh3, hMSH3, Divergent upstream protein, DUP, Mismatch repair protein 1, MRP1, MSH3, DUC1, DUG

Calculated MW

127412 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Mouse

Protein Name

DNA mismatch repair protein Msh3

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

E.coli-derived human MSH3 recombinant protein (Position: E434-N739). Human MSH3 shares 83% amino acid (aa) sequence identity with mouse MSH3.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution,

at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the DNA mismatch repair MutS family. MSH3 subfamily.

Anti-MSH3 Picoband Antibody - Protein Information

Name MSH3

Synonyms DUC1, DUG

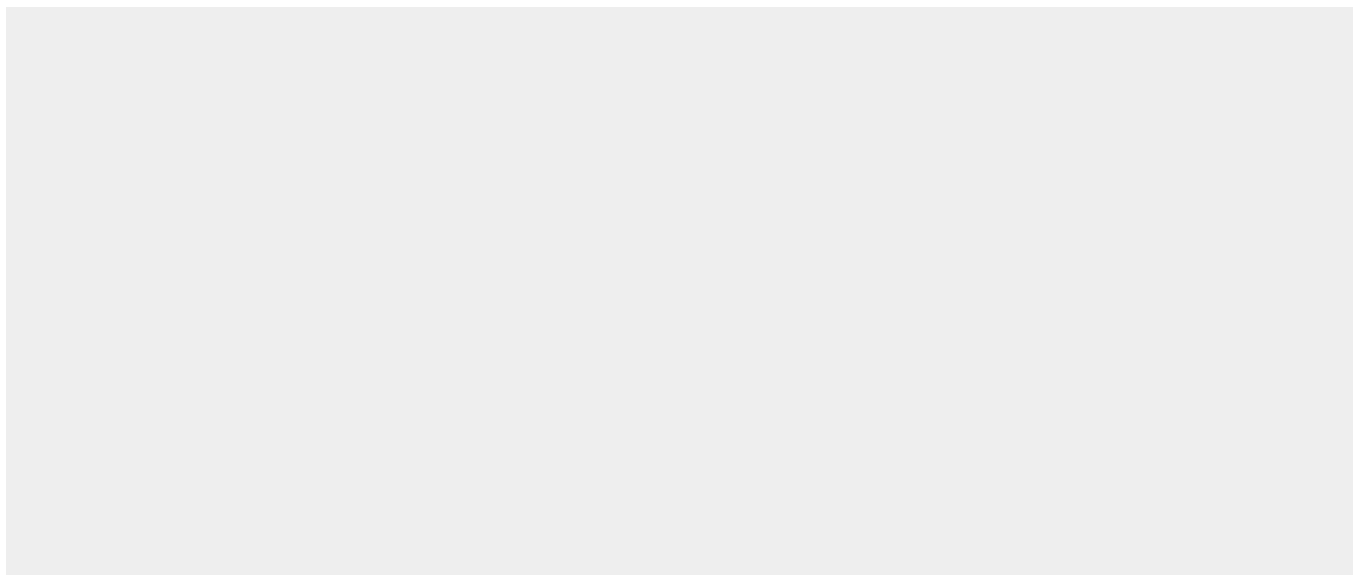
Function

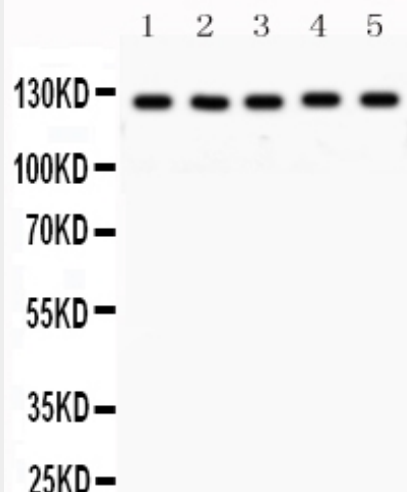
Component of the post-replicative DNA mismatch repair system (MMR). Heterodimerizes with MSH2 to form MutS beta which binds to DNA mismatches thereby initiating DNA repair. When bound, the MutS beta heterodimer bends the DNA helix and shields approximately 20 base pairs. MutS beta recognizes large insertion-deletion loops (IDL) up to 13 nucleotides long. 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.

Anti-MSH3 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-MSH3 Picoband Antibody - Images



Anti- MSH3 Picoband antibody, ABO11976, Western blotting All lanes: Anti MSH3 (ABO11976) at 0.5ug/ml
Lane 1: Mouse Skeletal Muscle Tissue Lysate at 50ug
Lane 2: Mouse Cardiac Muscle Tissue Lysate at 50ug
Lane 3: NIH Whole Cell Lysate at 40ug
Lane 4: U20S Whole Cell Lysate at 40ug
Lane 5: HT1080 Whole Cell Lysate at 40ug
Predicted bind size: 127KD
Observed bind size: 127KD

Anti-MSH3 Picoband Antibody - Background

DNA mismatch repair protein, MutS Homolog 3 (MSH3), also known as MRP1 or DUP, is a human homologue of the bacterial mismatch repair protein MutS that participates in the mismatch repair (MMR) system. It is mapped to 5q14.1. The primary function of MSH3 is to maintain the stability of the genome and enact tumor suppression by forming the heterodimer MutS² to correct long insertion/deletion loops and base-base mispairs. The most significant role of MSH3 in cancer is the suppression of tumors by repair of somatic mutations in DNA that occur as the result of base-base mispairs and insertion/deletion loops. Both loss of expression and over expression of MSH3 can lead to carcinogenic effects. What's more, it has been shown that inactivation of the MSH3 gene may be involved in the development of hematologic malignancies.