

# Summary

Production Name	MSH3 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Rat,Mouse

### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

### Immunogen

Gene Name	MSH3
Alternative Names	MSH3; DUC1; DUG; DNA mismatch repair protein Msh3; hMSH3; Divergent upstream
	protein; DUP; Mismatch repair protein 1; MRP1
Gene ID	4437.0
SwissProt ID	P20585.The antiserum was produced against synthesized peptide derived from human
	MSH3. AA range:51-100

# Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:20000
Molecular Weight	127kD



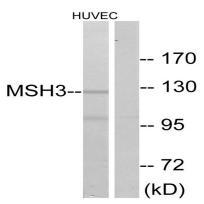
### Background

The protein encoded by this gene forms a heterodimer with MSH2 to form MutS beta, part of the post-replicative DNA mismatch repair system. MutS beta initiates mismatch repair by binding to a mismatch and then forming a complex with MutL alpha heterodimer. This gene contains a polymorphic 9 bp tandem repeat sequence in the first exon. The repeat is present 6 times in the reference genome sequence and 3-7 repeats have been reported. Defects in this gene are a cause of susceptibility to endometrial cancer. [provided by RefSeq, Mar 2011],disease:Defects in MSH3 are a cause of susceptibility to endometrial cancer. [provided by RefSeq, Mar 2011],disease:Defects in MSH3 are a cause of susceptibility to endometrial cancer [MIM:608089].,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.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,sequence caution:Contaminating sequence. Potential poly-A sequence.,similarity:Belongs to the DNA mismatch repair mutS family. MSH3 subfamily.,subunit:Heterodimer consisting of MSH2-MSH3 (MutS beta). Forms a ternary complex with MutL alpha (MLH1-PMS1). Interacts with EXO1.,

#### **Research Area**

Mismatch repair; Pathways in cancer; Colorectal cancer;

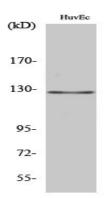
## Image Data



Western blot analysis of lysates from HUVEC cells, using MSH3 Antibody. The lane on the right is blocked with the synthesized peptide.

# Product Name: MSH3 Rabbit Polyclonal Antibody Catalog #: APRab14172





Western Blot analysis of various cells using MSH3 Polyclonal Antibody diluted at 1: 2000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).

#### Note

For research use only.