



# Mouse Anti-Human MSH6 monoclonal antibody, clone JID117 (CABT-L2842)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Product Overview</b>	This antibody is intended for qualified laboratories to qualitatively identify by light microscopy the presence of associated antigens in sections of formalin-fixed, paraffin-embedded tissue sections using IHC test methods.
<b>Specificity</b>	Human MSH6
<b>Isotype</b>	IgG
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	JID117
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	IHC
<b>Reconstitution</b>	The prediluted antibody does not require any mixing, dilution, reconstitution, or titration; the antibody is ready-to-use and optimized for staining. The concentrated antibody requires dilution in the optimized buffer, to the recommended working dilution range.
<b>Positive Control</b>	Colon, Colon Carcinoma
<b>Format</b>	Liquid
<b>Size</b>	Predilut: 7ml; Concentrate: 100ul, 1ml. Positive control slides also available.
<b>Buffer</b>	Predilute: Antibody Diluent Buffer Concentrate: Tris Buffer, pH 7.3 - 7.7, with 1% BSA
<b>Preservative</b>	<0.1% Sodium Azide
<b>Storage</b>	Store at 2-8°C. Do not freeze.
<b>Ship</b>	Wet ice
<b>Warnings</b>	This antibody is intended for use in Immunohistochemical applications on formalinixed paraffin-

## BACKGROUND

### Introduction

MutS Homolog 6 (MSH6) is a protein involved in the mismatch-repair pathway. This protein is commonly associated with hereditary non-polyposis colorectal cancer, and mutations in this gene are correlated with the development of sporadic colorectal carcinoma. Studies have shown that mutations in MSH6, when co-indicated with mutations in MSH1 and MSH2, contribute to the development of sporadic colorectal carcinoma. Use of Anti-MSH6 is optimized when paired in an IHC panel with MSH2, MLH1, and PMS2.

### Keywords

HNPCC5;HSAP;MSH6;DNA mismatch repair protein Msh6;mutS-alpha 160 kDa subunit

## GENE INFORMATION

<b>Gene Name</b>	MSH6 mutS homolog 6 [ Homo sapiens (human) ]
<b>Official Symbol</b>	MSH6
<b>Synonyms</b>	MSH6; mutS homolog 6; GTBP; HSAP; p160; GTMBP; HNPCC5; DNA mismatch repair protein Msh6; sperm-associated protein; mutS-alpha 160 kDa subunit; G/T mismatch-binding protein;
<b>Entrez Gene ID</b>	<a href="#">2956</a>
<b>Protein Refseq</b>	NP_000170
<b>UniProt ID</b>	<a href="#">P52701</a>
<b>Chromosome Location</b>	2p16
<b>Pathway</b>	BRCA1-associated genome surveillance complex (BASC); Colorectal cancer; DNA Repair; Integrated Breast Cancer Pathway; Integrated Cancer pathway; Mismatch Repair; Mismatch repair; Mismatch repair (MMR) directed by MSH2:MSH6 (MutSalpha);
<b>Function</b>	contributes_to ADP binding; contributes_to ATP binding; contributes_to ATPase activity; DNA-dependent ATPase activity; contributes_to MutLalpha complex binding; chromatin binding; contributes_to double-stranded DNA binding; contributes_to four-way junction DNA binding; contributes_to guanine/thymine mispair binding; contributes_to magnesium ion binding; methylated histone binding; mismatched DNA binding; contributes_to mismatched DNA binding; contributes_to oxidized purine DNA binding; protein binding; contributes_to protein binding; NOT protein homodimerization activity; contributes_to single guanine insertion binding; contributes_to single thymine insertion binding;