

Datasheet for ABIN967525

## anti-PMS2 antibody

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### Overview

Quantity:	0.1 mg
Target:	PMS2
Reactivity:	Human, Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This PMS2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunoprecipitation (IP)

### Product Details

Brand:	BD Pharmingen™
Immunogen:	Recombinant Human PMS2
Clone:	A16-4
Isotype:	IgG1 kappa
Cross-Reactivity:	Mouse (Murine)
Characteristics:	<ol style="list-style-type: none"> <li>1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.</li> <li>2. Please refer to us for technical protocols.</li> <li>3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.</li> </ol>
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

## Target Details

Target:	PMS2
Alternative Name:	PMS2 ( <a href="#">PMS2 Products</a> )
Background:	<p>The repair of mismatched DNA is essential to maintaining the integrity of genetic information over time. In bacteria the DNA repair process is accomplished by the MutL, MutH, and MutS proteins. The MutS protein initially recognizes and binds to mismatched DNA. Following this, MutH, an endonuclease, and MutL form a complex with MutS and carry out an excision repair mechanism. When bacteria are deficient in one of these enzymes a mutator phenotype arises characterized by genetic instability. The important role played by DNA repair enzymes is emphasized by the fact that they are highly conserved from bacteria to yeast to mammals. In humans the proteins are called MutS homolog2 (MSH2), MutL homolog (MLH1), and PMS2 which is also a homolog of MutL. After MSH2 and a partner bind to a mismatched DNA duplex, the complex is joined by a heterodimer of MLH1 and PMS2 which together help facilitate the later steps in mismatch repair. Two other members of this family, MSH3 and MSH6, can also join the MSH2-containing complex to help facilitate repair. The reduced molecular weight of PMS2 is ~100 kDa. mAb A16-4 recognizes human and mouse PMS2. Recombinant human PMS2 (C-terminal half) was used as immunogen.</p>
Molecular Weight:	100 kDa
Pathways:	<a href="#">DNA Damage Repair</a> , <a href="#">Production of Molecular Mediator of Immune Response</a>

## Application Details

Comment:	Related Products: ABIN968533, ABIN967389
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Concentration:	0.5 mg/mL
Buffer:	Aqueous buffered solution containing ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C

Handling

Storage Comment: Store undiluted at 4° C.

Publications

Product cited in: Marsischky, Filosi, Kane, Kolodner: "Redundancy of *Saccharomyces cerevisiae* MSH3 and MSH6 in MSH2-dependent mismatch repair." in: **Genes & development**, Vol. 10, Issue 4, pp. 407-20, (1996) ([PubMed](#)).

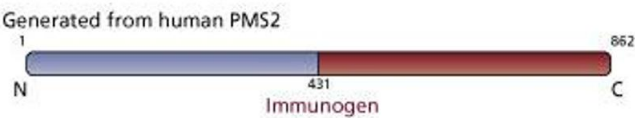
Cleaver: "It was a very good year for DNA repair." in: **Cell**, Vol. 76, Issue 1, pp. 1-4, (1994) ([PubMed](#)).

Prolla, Christie, Liskay: "Dual requirement in yeast DNA mismatch repair for MLH1 and PMS1, two homologs of the bacterial mutL gene." in: **Molecular and cellular biology**, Vol. 14, Issue 1, pp. 407-15, (1994) ([PubMed](#)).

Prolla, Pang, Alani, Kolodner, Liskay: "MLH1, PMS1, and MSH2 interactions during the initiation of DNA mismatch repair in yeast." in: **Science (New York, N.Y.)**, Vol. 265, Issue 5175, pp. 1091-3, (1994) ([PubMed](#)).

Su, Modrich: "Escherichia coli mutS-encoded protein binds to mismatched DNA base pairs." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 83, Issue 14, pp. 5057-61, (1986) ([PubMed](#)).

Images





Western Blotting

**Image 2.** Western blot analysis of PMS2. Lysate from A431 human epidermal cells was probed with anti-PMS2 (clone A16-4, ABIN967525) between 2.0 and 0.08  $\mu\text{g/ml}$  and identifies PMS2 at  $\sim 100$  kDa.

Western Blotting

**Image 3.**