

PMS2 Recombinant Rabbit Monoclonal Antibody Product Datasheet

Catalog# BX50112

Clone# BP6116

Predicted Molecular Wt: 96kDa
Species Cross-reactivity: Human
Applications: IHC-P

Purity: ProA affinity purified IgG
Form: Liquid
Swissprot ID: P54278

Background:

Mismatch repair (MMR) proteins is a group of nuclear enzymes, which in all proliferating cells participate in repair of base-base mismatch, that occur during DNA replication. Loss of MMR proteins leads to an accumulation of DNA replication errors in the proliferating cells, particularly in areas of the genome with short repetitive nucleotide sequences, a phenomenon known as microsatellite instability (MSI).

The PMS2 protein forms a heterodimer with the MLH1 protein which is then activated in the presence of ATP; this complex coordinates the binding of other proteins that repair DNA errors arising during cell preparation for cell division. The loss of PMS2 expression in tumors can be helpful in identifying hMLH1 mutation carriers and identifies their suitability for mutation analysis. PMS2 gene defects account for a small but significant proportion of colorectal cancers and for a substantial proportion of tumors with microsatellite instability.

Compared to molecular biological techniques, immunohistochemical analysis of MMR protein expression is much simpler and cheaper. Immunohistochemical analysis helps to pinpoint the affected gene and should be readily accessible in a pathology laboratory.

Subcellular location:

Nucleus

Recommended method:

Heat induced epitope retrieval with Tris-EDTA buffer (pH 9.0), primary antibody incubate at RT (18°C-25°C) for 30 minutes.

Immunogen:

Synthetic peptide corresponding to residues within aa1-100 of PMS2 was used as an immunogen.

Storage Buffer:

PBS 59%, Sodium azide 0.01%, Glycerol 40%, BSA 0.05%.

Storage conditions:

-20°C

Storage instructions:

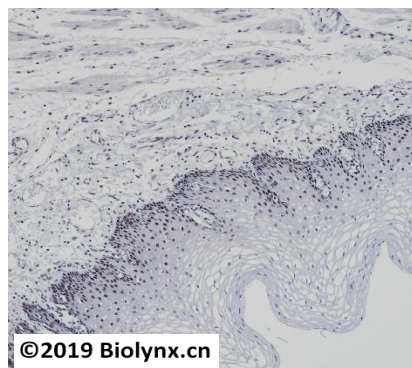
Shipped on blue ice. Upon delivery, aliquot, and store at -20°C. Avoid freeze / thaw cycles.

Recommended Dilutions:


IHC-P: 1:100-1:200

Background References:

- Shia J, Virchows Arch. 2004 Nov;445(5):431-41. Epub 2004 Sep 29.
- Wright CL, Am J Surg Pathol. 2003 Nov;27(11):1393-406.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of esophagus labelling PMS2 with BP6116. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0.

Product QC'd by: 

For research use only. Not for use in diagnostic or therapeutic applications.