# abcam

## Product datasheet

## Anti-MLH3 antibody ab111942

## 1 Image

#### Overview

Product name Anti-MLH3 antibody

**Description** Rabbit polyclonal to MLH3

Host species Rabbit

Tested applications Suitable for: WB

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

**Immunogen** Recombinant fragment, corresponding to a region within amino acids 1-282 of Human MLH3

(AAI12168).

**Positive control** A549, HeLa, HepG2 and HCT116 whole cell lysates.

**General notes**The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

**Storage instructions** Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

Storage buffer pH: 7.00

Preservative: 0.01% Thimerosal (merthiolate)

Constituents: 1.21% Tris, 0.75% Glycine, 20% Glycerol (glycerin, glycerine)

Purity Immunogen affinity purified

**Purification notes** ab111942 is purified by antigen-affinity chromatography.

**Clonality** Polyclonal

**Isotype** IgG

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#### **Applications**

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab111942 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/3000. Predicted molecular weight: 161 kDa.

<b>Target</b>	
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**Function** 

Probably involved in the repair of mismatches in DNA.

Tissue specificity

Ubiquitous.

Involvement in disease

Defects in MLH3 are the cause of hereditary non-polyposis colorectal cancer type 7 (HNPCC7) [MIM:614385]. Mutations in more than one gene locus can be involved alone or in combination in the production of the HNPCC phenotype (also called Lynch syndrome). Most families with clinically recognized HNPCC have mutations in either MLH1 or MSH2 genes. HNPCC is an autosomal, dominantly inherited disease associated with marked increase in cancer susceptibility. It is characterized by a familial predisposition to early onset colorectal carcinoma (CRC) and extra-colonic cancers of the gastrointestinal, urological and female reproductive tracts. HNPCC is reported to be the most common form of inherited colorectal cancer in the Western world, and accounts for 15% of all colon cancers. Cancers in HNPCC originate within benign neoplastic polyps termed adenomas. Clinically, HNPCC is often divided into two subgroups. Type I: hereditary predisposition to colorectal cancer, a young age of onset, and carcinoma observed in the proximal colon. Type II: patients have an increased risk for cancers in certain tissues such as the uterus, ovary, breast, stomach, small intestine, skin, and larynx in addition to the colon. Diagnosis of classical HNPCC is based on the Amsterdam criteria: 3 or more relatives affected by colorectal cancer, one a first degree relative of the other two; 2 or more generation affected; 1 or more colorectal cancers presenting before 50 years of age; exclusion of hereditary polyposis syndromes. The term 'suspected HNPCC' or 'incomplete HNPCC' can be used to describe families who do not or only partially fulfill the Amsterdam criteria, but in whom a genetic basis for colon cancer is strongly suspected. Defects in MLH3 are a cause of colorectal cancer (CRC) [MIM:114500].

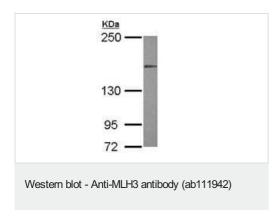
Sequence similarities

Belongs to the DNA mismatch repair mutL/hexB family.

**Cellular localization** 

Nucleus.

#### **Images**



Anti-MLH3 antibody (ab111942) at 1/1000 dilution + HCT116 whole cell lysate at 30  $\mu g$ 

Predicted band size: 161 kDa

5% SDS PAGE

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

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