abcam

Product datasheet

Anti-MSH3 antibody ab93663

1 References   **2 Images**

Overview

Product name	Anti-MSH3 antibody
Description	Rabbit polyclonal to MSH3
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, ICC/IF
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide within Human MSH3 aa 350-450 (internal sequence). The exact sequence is proprietary. Database link: **P20585**
Positive control	Human rectal carcinoma tissue
General notes	**This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.** 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. Store at +4°C.
Storage buffer	pH: 7.60 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
Purity	Immunogen affinity purified
Purification notes	Immunogen affinity purified immunoglobulin from rabbit serum.
Clonality	Polyclonal
Isotype	IgG

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Applications

The Abpromise guarantee   Our **Abpromise guarantee** covers the use of ab93663 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
IHC-P		1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		Use a concentration of 5 µg/ml.

Target

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.

Involvement in disease   Defects in MSH3 are a cause of susceptibility to endometrial cancer (ENDMC) [MIM:608089].
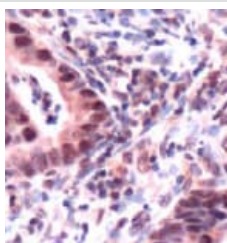
Sequence similarities   Belongs to the DNA mismatch repair mutS family. MSH3 subfamily.
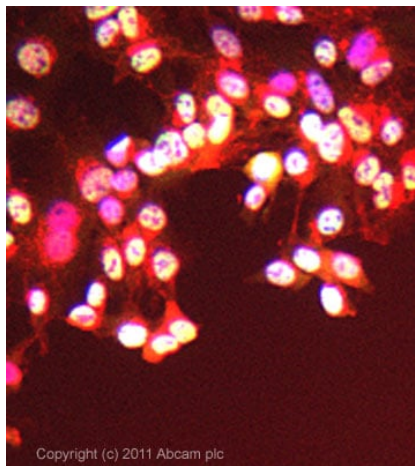
Post-translational modifications   Phosphorylated upon DNA damage, probably by ATM or ATR.

Images

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MSH3 antibody (ab93663)

ab93663, at a 1/100 dilution, staining MSH3 in formalin fixed, paraffin embedded Human rectal carcinoma tissue by Immunohistochemistry.

ICC/IF image of ab93663 stained HepG2 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab93663, 5µg/ml) overnight at +4°C. The secondary antibody (green) was **ab96899**, DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h.Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

Immunocytochemistry/ Immunofluorescence - Anti-MSH3 antibody (ab93663)

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