

MLH1 Recombinant Rabbit Monoclonal Antibody Product Datasheet

Catalog# BX22300180

Clone# RR618

Predicted Molecular Wt: 84kDa

Species Cross-reactivity: Human

Species cross-reactivity determined by WB

Applications: WB IHC-P IF/ICC FC

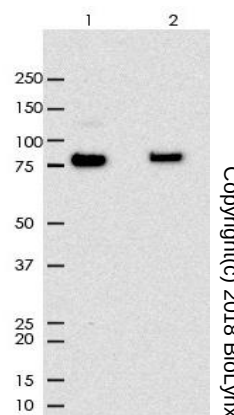
Purity: ProA affinity purified IgG

Form: Liquid

Swissprot ID: P40692

Background:

Heterodimerizes with PMS2 to form MutL alpha, a component of the post-replicative DNA mismatch repair system (MMR). DNA repair is initiated by MutS alpha (MSH2-MSH6) or MutS beta (MSH2-MSH6) binding to a dsDNA mismatch, then MutL alpha is recruited to the heteroduplex. It introduces single-strand breaks near the mismatch and thus generates new entry points for the exonuclease EXO1 to degrade the strand containing the mismatch.



Immunogen:

Synthetic peptide according to the C terminus of MLH1 was used as an immunogen.

All lanes: Anti-MLH1 antibody
at 1:5,000 dilution

Predicted MW: 84 kDa

Observed MW: 84 kDa

Lysates at 10 µg per lane

2nd Ab:

GAR HRP(H+L) 1:5,000

Exposure: 20s

Storage Buffer:

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

Lane 1: K562

Lane 2: HeLa

Storage conditions:

-20°C.

Storage instructions:

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

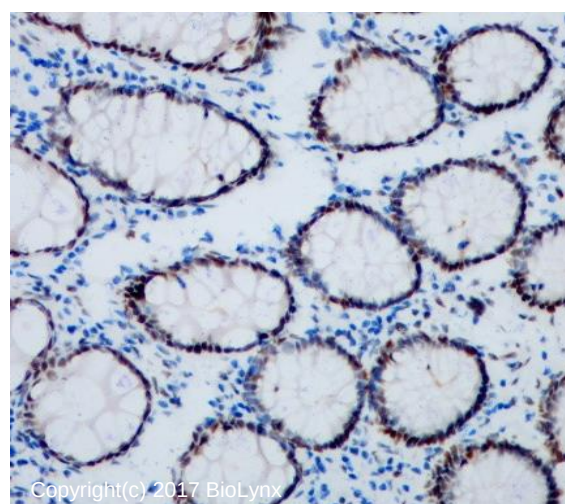
Recommended Dilutions:

WB: 1:2,000-1:5,000
IHC-P: 1:100 - 1:200
IF/ICC: 1:2,000 -1:10,000
FC: 1:10 - 1:200

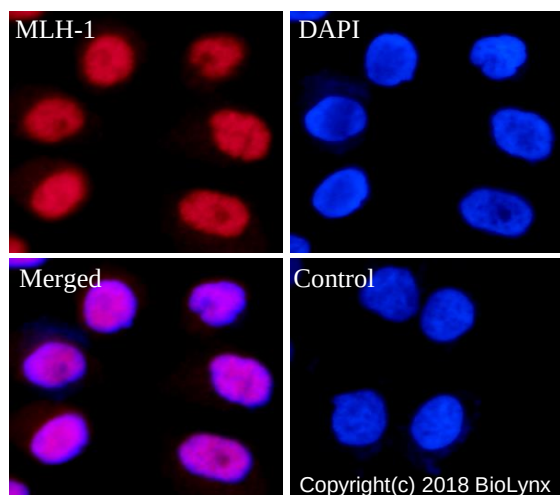
Background References:

1. Kadyrov F.A., Cell 126:297-308(2006).

2. Sacho E.J., Mol. Cell 29:112-121(2008).

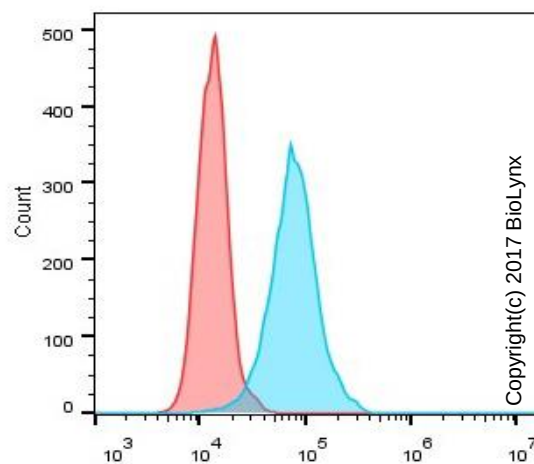


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon tissue labelling MLH1 with RR618 at 1:200. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0.



RR618 staining MLH1 in HeLa cells by IF/ICC (immunofluorescence/immunocytochemistry). Cells were fixed with paraformaldehyde, permeabilized with 0.1% Triton X-100 and blocked with 10% goat serum for half an hour at room temperature. Samples were incubated with primary antibody (1:2,000) at 4°C. An Alexa Fluor® 594-conjugated Goat Anti-Rabbit IgG polyclonal was used as the secondary antibody (1:500). DAPI (blue) was used as the nuclear counter stain.

Control: PBS and secondary antibody, An Alexa Fluor® 594-conjugated Goat Anti-Rabbit IgG (1:500).



Overlay histogram showing HeLa cells stained with RR618 (Blue). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% TritonX-100 for 15 min. The cells were then incubated in the antibody (RR618, 1:50 dilution) in 1x PBS/1% BSA for 30 min at 4°C. The secondary antibody used was a Goat Anti-Rabbit Alexa Fluor® 488 (IgG H+L) at 1:2,000 dilution for 20 min at 4°C. Unlabelled sample (red) was used as a control.

Product QC'd by:



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