

Product datasheet

Anti-Exonuclease 1 antibody ab155553

3 Images

Overview

Product name	Anti-Exonuclease 1 antibody
Description	Rabbit polyclonal to Exonuclease 1
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Mouse, Human
Immunogen	Recombinant fragment corresponding to a region within amino acids 474-753 of Human Exonuclease 1 (Uniprot ID: Q9UQ84).
Positive control	Jurkat and Mouse thymus whole cell lysates; HeLa cells.
General notes	<p>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.</p> <p>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</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab155553 in the following tested applications.

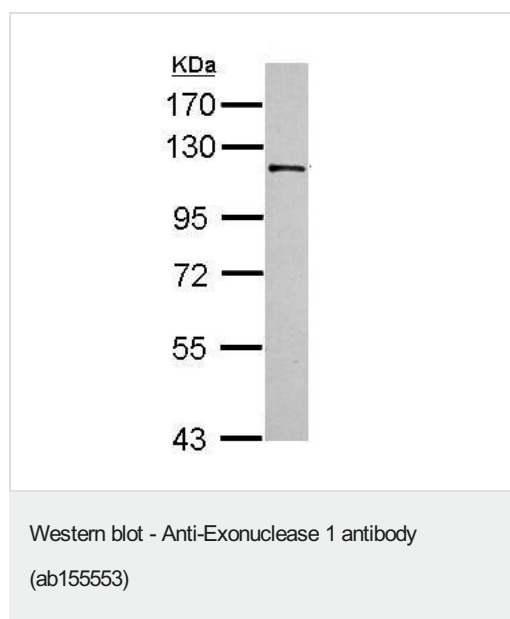
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/3000. Predicted molecular weight: 94 kDa.
ICC/IF		1/100 - 1/1000.

Target

Function	5'->3' double-stranded DNA exonuclease which may also possess a cryptic 3'->5' double-stranded DNA exonuclease activity. Functions in DNA mismatch repair (MMR) to excise mismatch-containing DNA tracts directed by strand breaks located either 5' or 3' to the mismatch. Also exhibits endonuclease activity against 5'-overhanging flap structures similar to those generated by displacement synthesis when DNA polymerase encounters the 5'-end of a downstream Okazaki fragment. Required for somatic hypermutation (SHM) and class switch recombination (CSR) of immunoglobulin genes. Essential for male and female meiosis.
Tissue specificity	Highly expressed in bone marrow, testis and thymus. Expressed at lower levels in colon, lymph nodes, ovary, placenta, prostate, small intestine, spleen and stomach.
Sequence similarities	Belongs to the XPG/RAD2 endonuclease family. EXO1 subfamily.
Developmental stage	Highly expressed in fetal liver and at lower levels in fetal brain, heart, kidney, spleen and thymus.
Post-translational modifications	Phosphorylated upon DNA damage and in response to agents stalling DNA replication, probably by ATM or ATR. Phosphorylation at Ser-454, Thr-621 and Ser-714 is induced upon DNA-damage caused by treatment with hydroxyurea (HU) but not upon IR treatment. The HU-induced EXO1 triple phosphorylation facilitates destabilisation/degradation of the protein.
Cellular localization	Nucleus. Colocalizes with PCNA to discrete nuclear foci in S-phase.

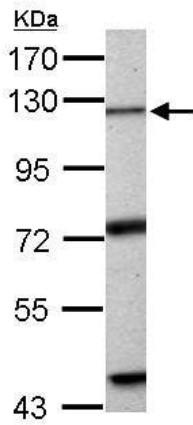
Images



Anti-Exonuclease 1 antibody (ab155553) at 1/1000 dilution + Jurkat whole cell lysate at 30 µg

Predicted band size: 94 kDa

7.5% SDS PAGE

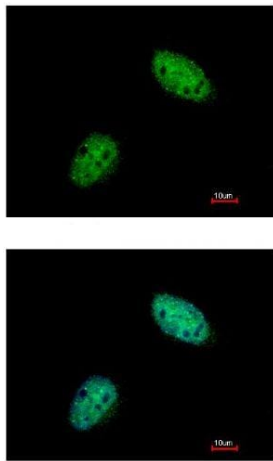


Anti-Exonuclease 1 antibody (ab155553) at 1/1000 dilution +
 Mouse thymus whole cell lysate at 50 µg

Predicted band size: 94 kDa

7.5% SDS PAGE

Western blot - Anti-Exonuclease 1 antibody
 (ab155553)



Immunofluorescence analysis of paraformaldehyde-fixed HeLa cells
 labeling Exonuclease 1 with ab155553 at 1/500 dilution (green).
 The image in the lower panel is costained with Hoechst 33342
 (blue).

Immunocytochemistry/ Immunofluorescence - Anti-
 Exonuclease 1 antibody (ab155553)

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

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