abcam

Product datasheet

Anti-SMUG1 antibody ab15716

2 References 3 Images

Overview

Product name	Anti-SMUG1 antibody
Description	Goat polyclonal to SMUG1
Host species	Goat
Tested applications	**Suitable for:** ICC, Flow Cyt (Intra)
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide: PQAFLLGSIHEPA, corresponding to N terminal amino acids 2-14 of SMUG1. Run BLAST with ExPASy Run BLAST with NCBI
Positive control	ICC: U2OS and MCF7 cells; Flow Cyt (intra): MCF7 cells.
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. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: Tris buffered saline, 0.5% BSA
Purity	Immunogen affinity purified
Purification notes	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
Clonality	Polyclonal
Isotype	IgG

Applications

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The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab15716 in the following tested applications.

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

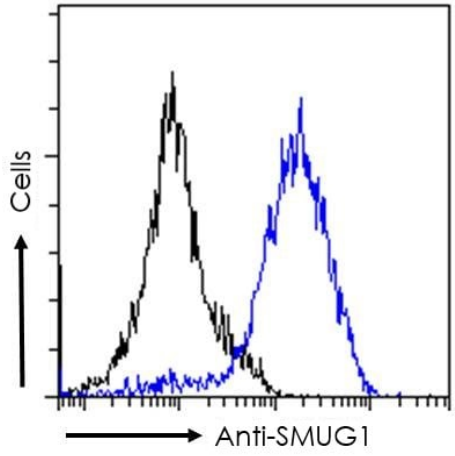
Application	Abreviews	Notes
ICC		Use a concentration of 10 µg/ml.
Flow Cyt (Intra)		Use a concentration of 10 µg/ml.

Target

Function Recognizes base lesions in the genome and initiates base excision DNA repair. Acts as a monofunctional DNA glycosylase specific for uracil (U) residues in DNA with a preference for single-stranded DNA substrates. The activity is greater toward mismatches (U/G) compared to matches (U/A). Excises uracil (U), 5-formyluracil (fU) and uracil derivatives bearing an oxidized group at C5 [5-hydroxyuracil (hoU) and 5-hydroxymethyluracil (hmU)] in ssDNA and dsDNA, but not analogous cytosine derivatives (5-hydroxycytosine and 5-formylcytosine), nor other oxidized bases. The activity is damage-specific and salt-dependent. The substrate preference is the following: ssDNA > dsDNA (G pair) = dsDNA (A pair) at low salt concentration, and dsDNA (G pair) > dsDNA (A pair) > ssDNA at high salt concentration.

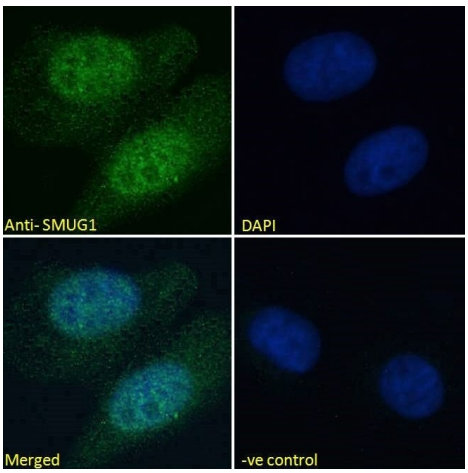
Cellular localization Nucleus.

Images



Flow Cytometry (Intracellular) - Anti-SMUG1 antibody (ab15716)

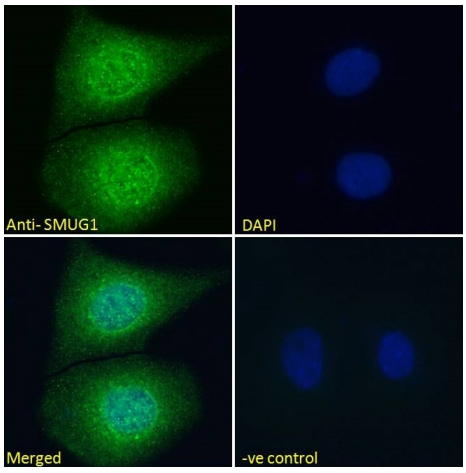
Flow cytometric analysis of paraformaldehyde fixed MCF7 cells (blue line) labelling SMUG1 with ab15716. Cells permeabilized with 0.5% Triton. Primary incubation 1 hour (10 µg/mL) followed by Alexa Fluor® 488 secondary antibody (1 µg/mL). IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor® 488 secondary antibody.



Immunocytochemistry - Anti-SMUG1 antibody (ab15716)

Immunocytochemistry/immunofluorescence analysis of U2OS cells labelling SMUG1 with ab15716 at 10 µg/mL showing strong nuclear staining. Cells were fixed with paraformaldehyde and permeabilized with 0.15% Triton. Primary incubation for 1 hour. Alexa Fluor® 488 secondary antibody at 2 µg/mL (green). Nuclear DNA was labelled with DAPI (blue).

Negative control: Unimmunized goat IgG (10 µg/mL) followed by Alexa Fluor® 488 secondary antibody (2 µg/mL).



Immunocytochemistry - Anti-SMUG1 antibody (ab15716)

Immunocytochemistry/immunofluorescence analysis of MCF7 cells labelling SMUG1 with ab15716 at 10 µg/mL showing strong nuclear and cytoplasmic staining. Cells were fixed with paraformaldehyde and permeabilized with 0.15% Triton. Primary incubation for 1 hour. Alexa Fluor® 488 secondary antibody at 2 µg/mL (green). Nuclear DNA was labelled with DAPI (blue).

Negative control: Unimmunized goat IgG (10 µg/mL) followed by Alexa Fluor® 488 secondary antibody (2 µg/mL).

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