

Goat Anti-SMUG1 Antibody

Peptide-affinity purified goat antibody Catalog # AF2011a

Specification

Goat Anti-SMUG1 Antibody - Product Information

Application WB
Primary Accession Q53HV7

Other Accession <u>NP_055126</u>, <u>23583</u>

Reactivity
Human
Host
Clonality
Polyclonal
Concentration
Isotype
Goat
100ug/200ul
IgG

Isotype IgG
Calculated MW 29862

Goat Anti-SMUG1 Antibody - Additional Information

Gene ID 23583

Other Names

Single-strand selective monofunctional uracil DNA glycosylase, 3.2.2.-, SMUG1

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-SMUG1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-SMUG1 Antibody - Protein Information

Name SMUG1

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 Location Nucleus

Goat Anti-SMUG1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Goat Anti-SMUG1 Antibody - Images



AF2011a staining (0.5 μ g/ml) of Molt-4 lysate (RIPA buffer, 35 μ g total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

Goat Anti-SMUG1 Antibody - Background

SMUG1 is a glycosylase that removes uracil from single- and double-stranded DNA in nuclear chromatin, thus contributing to base excision repair.

Goat Anti-SMUG1 Antibody - References

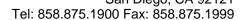
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DNA uracil concentrations in an urban Puerto Rican population. Chanson A, et al. Am J Clin Nutr, 2009 Jun. PMID 19403629.

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