

SMUG1 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17422a

Specification

SMUG1 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	Q53HV7
Other Accession	NP_055126.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	29862
Antigen Region	43-71

SMUG1 Antibody (N-term) - Additional Information

Gene ID 23583

Other Names

Single-strand selective monofunctional uracil DNA glycosylase, 322-, SMUG1

Target/Specificity

This SMUG1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 43-71 amino acids from the N-terminal region of human SMUG1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

SMUG1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SMUG1 Antibody (N-term) - 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

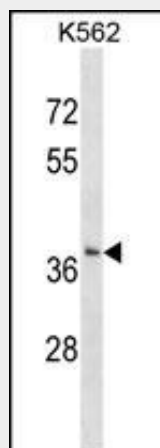
Nucleus

SMUG1 Antibody (N-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SMUG1 Antibody (N-term) - Images



SMUG1 Antibody (N-term) (Cat. #AP17422a) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the SMUG1 antibody detected the SMUG1 protein (arrow).

SMUG1 Antibody (N-term) - Background

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

SMUG1 Antibody (N-term) - References

Arora, M., et al. Leukemia 24(8):1470-1475(2010)
Thyagarajan, B., et al. Biol. Blood Marrow Transplant. 16(8):1084-1089(2010)

Briggs, F.B., et al. Am. J. Epidemiol. 172(2):217-224(2010)
Chanson, A., et al. Am. J. Clin. Nutr. 89(6):1927-1936(2009)
Knaevelsrud, I., et al. Int. J. Radiat. Biol. 85(5):413-420(2009)