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SMUG1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP17422a

Specification

SMUG1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q53HV7

SMUG1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 23583

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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SMUG1 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- Blocking Peptides

SMUG1 Antibody (N-term) Blocking Peptide - Images

SMUG1 Antibody (N-term) Blocking Peptide - Background

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

SMUG1 Antibody (N-term) Blocking Peptide - 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)