Product Datasheet

SMUG1 Antibody

Catalog No: #35177

Package Size: #35177-1 50ul #35177-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

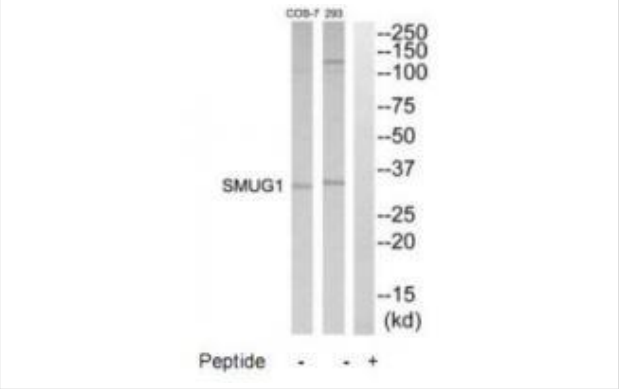
Description

Product Name	SMUG1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of total SMUG1 protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from internal of human SMUG1.
Target Name	SMUG1
Other Names	Single-strand selective monofunctional uracil DNA glycosylase; SMUG1;
Accession No.	Swiss-Prot: Q53HV7NCBI Gene ID: 23583
Uniprot	Q53HV7
GeneID	23583;
SDS-PAGE MW	32kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

Western blotting: 1:500~1:3000

Images



Western blot analysis of extracts from 293 and COS7 cells, using SMUG1 antibody #35177.

Background

Responsible for recognizing base lesions in the genome and initiating base excision DNA repair. Acts as a monofunctional DNA glycosylase specific for uracil (U) residues in DNA and has a preference for single-stranded DNA substrates. The activity is greater against mismatches (U/G) than against matches (U/A). Excised 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) and other oxidized damage. The activity is damage specificity and salt concentration-dependent. The general order of the preference for ssDNA and dsDNA is the following: ssDNA > dsDNA (G pair) = dsDNA (A pair) at the low salt concentration. At the high concentration dsDNA (G pair) > dsDNA (A pair) > ssDNA.

Ide H., Biochemistry 42:5003-5012(2003).
Sugano S., Nat. Genet. 36:40-45(2004).
Venter J.C., Submitted (JUL-2005).

Note: This product is for in vitro research use only