

Goat Anti-EXO1 Antibody

Peptide-affinity purified goat antibody Catalog # AF1386a

Specification

Goat Anti-EXO1 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Concentration Isotype Calculated MW WB, E <u>O9U084</u> <u>NP_569082</u>, <u>9156</u> Human Goat Polyclonal 100ug/200ul IgG 94103

Goat Anti-EXO1 Antibody - Additional Information

Gene ID 9156

Other Names Exonuclease 1, hExo1, 3.1.-.-, Exonuclease I, hExol, EXO1, EXOI, HEX1

Dilution WB~~1:1000 E~~N/A

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-EXO1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-EXO1 Antibody - Protein Information

Name EXO1

Synonyms EXOI, HEX1

Function

5'->3' double-stranded DNA exonuclease which may also possess a cryptic 3'->5' double-stranded



DNA exonuclease activity. Functions in DNA mismatch repair (MMR) to excise mismatch-containing DNA tracts directed by strand breaks located either 5' or 3' to the mismatch. Also exhibits endonuclease activity against 5'-overhanging flap structures similar to those generated by displacement synthesis when DNA polymerase encounters the 5'-end of a downstream Okazaki fragment. Required for somatic hypermutation (SHM) and class switch recombination (CSR) of immunoglobulin genes. Essential for male and female meiosis.

Cellular Location

Nucleus Note=Colocalizes with PCNA to discrete nuclear foci in S-phase

Tissue Location

Highly expressed in bone marrow, testis and thymus. Expressed at lower levels in colon, lymph nodes, ovary, placenta, prostate, small intestine, spleen and stomach

Goat Anti-EXO1 Antibody - Protocols

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

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

Goat Anti-EXO1 Antibody - Images



AF1386a (0.2 μ g/ml) staining of A549 cell lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-EXO1 Antibody - Background

This gene encodes a protein with 5' to 3' exonuclease activity as well as an RNase H activity. It is similar to the Saccharomyces cerevisiae protein Exo1 which interacts with Msh2 and which is involved in mismatch repair and recombination. Alternative splicing of this gene results in three transcript variants encoding two different isoforms.

Goat Anti-EXO1 Antibody - References

A Large-scale genetic association study of esophageal adenocarcinoma risk. Liu CY, et al.



Carcinogenesis, 2010 Jul. PMID 20453000.

Delineation of WRN helicase function with EXO1 in the replicational stress response. Aggarwal M, et al. DNA Repair (Amst), 2010 Jul 1. PMID 20447876.

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.

Single-nucleotide polymorphism of the Exo1 gene: association with gastric cancer susceptibility and interaction with smoking in Taiwan. Bau DT, et al. Chin J Physiol, 2009 Dec 31. PMID 20337148. Distinct activities of exonuclease 1 and flap endonuclease 1 at telomeric g4 DNA. Vallur AC, et al. PLoS One, 2010 Jan 26. PMID 20126648.