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Goat Anti-SART3 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1960a

Specification

Goat Anti-SART3 Antibody - Product Information

Application	**WB**
Primary Accession	Q15020
Other Accession	NP_055521, 9733
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**109935**

Goat Anti-SART3 Antibody - Additional Information

Gene ID 9733

Other Names
Squamous cell carcinoma antigen recognized by T-cells 3, SART-3 {ECO:0000312|EMBL:BAA78384.1}, Tat-interacting protein of 110 kDa, Tip110, p110 nuclear RNA-binding protein, SART3 (HGNC:16860)

Format
0.5 mg IgG/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-SART3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-SART3 Antibody - Protein Information

Name SART3 (HGNC:16860)

Function
U6 snRNP-binding protein that functions as a recycling factor of the splicing machinery. Promotes the initial reassembly of U4 and U6 snRNPs following their ejection from the spliceosome during its maturation (PubMed:<a href="http://www.uniprot.org/citations/12032085"

target="_blank">12032085). Also binds U6atac snRNPs and may function as a recycling factor for U4atac/U6atac spliceosomal snRNP, an initial step in the assembly of U12-type spliceosomal complex. The U12-type spliceosomal complex plays a role in the splicing of introns with non- canonical splice sites (PubMed:14749385). May also function as a substrate-targeting factor for deubiquitinases like USP4 and USP15. Recruits USP4 to ubiquitinated PRPF3 within the U4/U5/U6 tri-snRNP complex, promoting PRPF3 deubiquitination and thereby regulating the spliceosome U4/U5/U6 tri-snRNP spliceosomal complex disassembly (PubMed:20595234). May also recruit the deubiquitinase USP15 to histone H2B and mediate histone deubiquitination, thereby regulating gene expression and/or DNA repair (PubMed:24526689). May play a role in hematopoiesis probably through transcription regulation of specific genes including MYC (By similarity).

Cellular Location
Nucleus, nucleoplasm. Nucleus, Cajal body. Nucleus speckle. Cytoplasm

Tissue Location
Ubiquitously expressed.

Goat Anti-SART3 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-SART3 Antibody - Images

AF1960a staining (0.01 µg/ml) of Jurkat cell lysate (RIPA buffer, 30 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

Goat Anti-SART3 Antibody - Background

The protein encoded by this gene is an RNA-binding nuclear protein that is a tumor-rejection antigen. This antigen possesses tumor epitopes capable of inducing HLA-A24-restricted and tumor-specific cytotoxic T lymphocytes in cancer patients and may be useful for specific immunotherapy. This gene product is found to be an important cellular factor for HIV-1 gene expression and viral replication. It also associates transiently with U6 and U4/U6 snRNPs during the recycling phase of the spliceosome cycle. This encoded protein is thought to be involved in the regulation of mRNA splicing.

Goat Anti-SART3 Antibody - References

Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.
Capability of SART3(109-118) peptide to induce cytotoxic T lymphocytes from prostate cancer patients with HLA class I-A11, -A31 and -A33 alleles. Mohamed ER, et al. Int J Oncol, 2009 Feb. PMID 19148489.
3'-cyclic phosphorylation of U6 snRNA leads to recruitment of recycling factor p110 through LSm proteins. Licht K, et al. RNA, 2008 Aug. PMID 18567812.
Systematic analysis of the protein interaction network for the human transcription machinery reveals the identity of the 7SK capping enzyme. Jeronimo C, et al. Mol Cell, 2007 Jul 20. PMID 17643375.
Large-scale mapping of human protein-protein interactions by mass spectrometry. Ewing RM, et al. Mol Syst Biol, 2007. PMID 17353931.