

Anti-p47 ING3 (GOAT) Antibody
p47ING3 Antibody
Catalog # ASR5083**Specification**

Anti-p47 ING3 (GOAT) Antibody - Product Information

Host	Goat
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Application	WB, E, I, LCI
Application Note	This affinity purified antibody has been tested for use in ELISA against the immunizing peptide. Specific conditions for western blotting reactivity should be optimized by the end user. Expect a band at approximately 47 kDa in size corresponding to ING3 isoform 1 by western blotting in the appropriate cell lysate or extract.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This affinity purified antibody was prepared from whole Goat serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near aa 285-310 of Human ING3 protein (Inhibitor of growth family, member 3).
Preservative	0.01% (w/v) Sodium Azide

Anti-p47 ING3 (GOAT) Antibody - Additional Information**Gene ID** 54556**Other Names**
54556**Purity**

This is an affinity-purified antibody produced by immunoaffinity chromatography using the immunizing peptide after immobilization to a solid phase. Reactivity occurs against human p47 ING3 protein. This sequence only shows homology to isoform 1 for ING3. The sequence is not present in isoforms 2 and 3. However, 100% homology is on record for this protein from human, dog, rat, chimpanzee and orangutan. Cross reactivity with p47 ING3 protein from mouse and chicken sources is also expected based on high homology (one amino acid change in sequence) by BLAST. Reactivity with p47 ING3 proteins from other sources is not known.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-p47 ING3 (GOAT) Antibody - Protein Information**Name** ING3**Function**

Component of the NuA4 histone acetyltransferase (HAT) complex which is involved in transcriptional activation of select genes principally by acetylation of nucleosomal histones H4 and H2A. This modification may both alter nucleosome - DNA interactions and promote interaction of the modified histones with other proteins which positively regulate transcription. This complex may be required for the activation of transcriptional programs associated with oncogene and proto-oncogene mediated growth induction, tumor suppressor mediated growth arrest and replicative senescence, apoptosis, and DNA repair. NuA4 may also play a direct role in DNA repair when directly recruited to sites of DNA damage. Component of a SWR1-like complex that specifically mediates the removal of histone H2A.Z/H2AZ1 from the nucleosome.

Cellular Location

Nucleus.

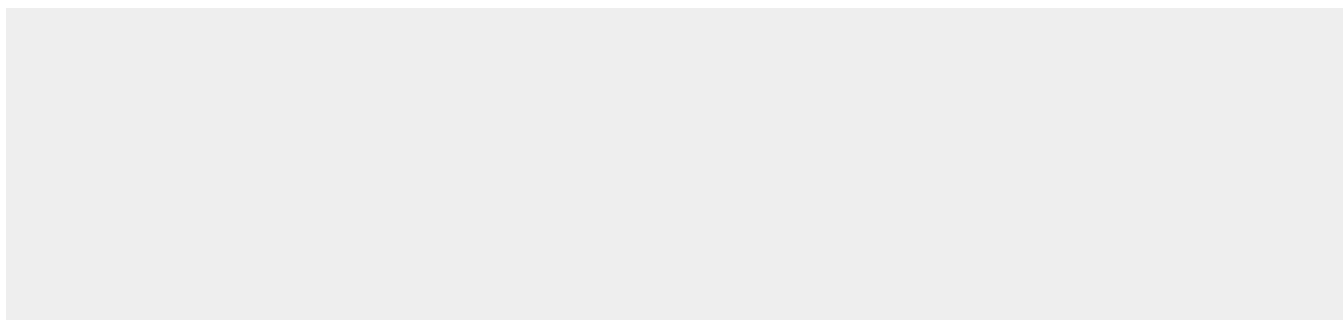
Tissue Location

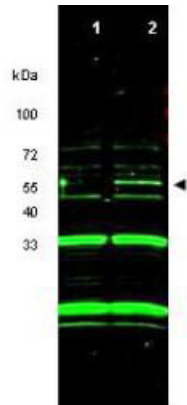
Expressed in brain, heart, kidney, liver, lung, ovaries, placenta, prostate, skeletal muscle, small intestine, spleen, testis and thymus

Anti-p47 ING3 (GOAT) 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 Cytometry](#)
- [Cell Culture](#)

Anti-p47 ING3 (GOAT) Antibody - Images



Western blot using Rockland's purified anti-ING3 antibody shows detection of a band at ~55 kDa corresponding to ING3 in RKO cells transfected with ING3 (lane 2). Control RKO cells do not show detection of this specific band (lane 1). The identity of the non-specific bands at 33 kDa and 20 kDa has not been determined. Each lane contains approximately 10 µg of RKO whole cell lysate (ATCC# CRL-2577 - human colon cancer) separated on a 4-20% Tris-Glycine gel by SDS-PAGE and transferred to nitrocellulose. After blocking with 5% NF dry milk, the membrane was probed with the primary antibody diluted to 1:1,000. Incubation was at 4° C overnight followed by washes and reaction with a 1:20,000 dilution of IRDye™ 800 conjugated Rb-a-Goat IgG [H&L] MXHu (605-432-013) for 45 min at room temperature. IRDye™ 800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.

Anti-p47 ING3 (GOAT) Antibody - Background

p47 ING3 is a tumor suppressor protein similar to ING1 that can interact with TP53, inhibit cell growth, and induce apoptosis. This protein contains a PHD-finger, which is a common motif in proteins involved in chromatin remodeling. This gene can activate p53 trans-activated promoters, including promoters of p21/waf1 and bax. Over-expression of this gene has been shown to inhibit cell growth and induce apoptosis. Allelic loss and reduced expression of this gene were detected in head and neck cancers. Multiple alternatively spliced transcript variants have been observed. The accession number listed below is for variant (1) that encodes the longest isoform.