

Datasheet for 600-101-284**p29ING4 Antibody****Overview**

Description:	Anti-p29 ING4 (GOAT) Antibody - 600-101-284
Item No.:	600-101-284
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Goat

Product Details

Background:	p29 ING4 is a tumor suppressor protein similar to ING1 that may inhibit tumor progression by modulating the transcriptional output of signaling pathways which regulate cell proliferation. p29 ING4 has been shown to suppress brain tumor angio-genesis through transcriptional repression of RelA/ NFkB3 target genes when complexed with RelA. p29 ING4 may also specifically suppress loss of contact inhibition elicited by activated oncogenes such as MYC. p29 ING4 shows a nuclear localization and interacts with EP300, TP53, RelA, inhibits cell growth, and induces apoptosis. This protein contains a PHD-finger, which is a common motif in proteins involved in chromatin remodeling. Multiple alternatively spliced transcript variants have been observed. The accession number listed below is for variant (1) that encodes the longest isoform.
Synonyms:	goat anti-p29 ING4 antibody, p29ING4, ING 4, ING-4, Inhibitor of growth family member 4 antibody, Inhibitor of growth family member 4 long isoform antibody, Inhibitor of growth protein 4 antibody, MGC12557 antibody
Host Species:	Goat
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ING4
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

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 150-175 of Human p29 ING4 protein (Inhibitor of growth family, member 4). This sequence only shows homology to isoform 1 for ING4.
Purity/Specificity:	This is an affinity purified antibody produced by immunoaffinity chromatography using the immunizing peptide after immobilization to a solid phase. Reactivity occurs against human p29 ING4 protein. The sequence is not present in isoforms 2 (see below). However, 100% homology is on record for this protein from human, dog, rat, and mouse. Cross reactivity with p29 ING4 protein from chimpanzee and chicken sources is also expected based on high homology (one amino acid change in sequence) by BLAST. Reactivity with p29 ING4 proteins from other sources is not known.
Relevant Links:	• UniProtKB - Q9UNL4 • NCBI - AAH13038.2 • GenelD - 51147

Application Details

Tested Applications:	ELISA, WB
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 29 kDa in size corresponding to ING4 isoform 1 by western blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:3,000 - 1:12,000
WB:	1:500 - 1:3,000

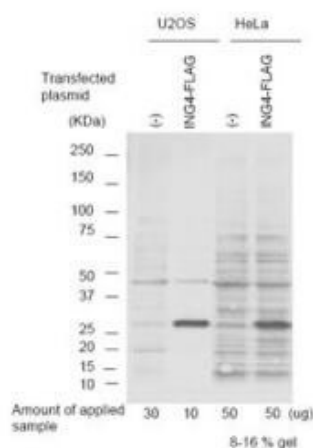
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.28 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

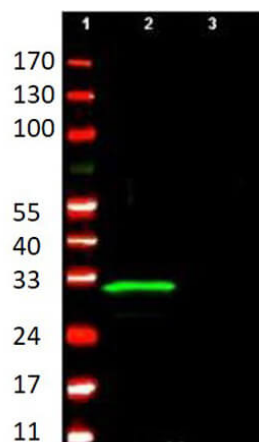
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

Anti-p29 ING4 polyclonal antibody detects ING4 protein by western blot in over expressed cell lysates. This antibody was used at 1.0 µg/ml to detect ING4 expression in control (-) and transformed U2OS and HeLa cell lysates. A predominant band corresponding to p29 ING4 is only seen in lysates from transformed cells. Personnel Communication, Motoko Unoki, NCI, NIH.



Western Blot

Anti-p29 ING4 polyclonal antibody detects ING4 protein by western blot. This antibody was used at 1.0 µg/ml to detect ING4 (lane 2) present in a U2OS whole cell lysate over expressing the protein. A control lysate (lane 3) shows no background staining. Comparison to MW markers (lane 1) indicates detection of a single band at ~29 kDa corresponding to ING4. A 4-20% TRIS-glycine gradient gel was used to separate the protein by SDS-PAGE under reducing conditions. The protein was transferred to nitrocellulose using standard methods. After blocking using 5% non-fat dry milk in PBS, the membrane was probed with the primary antibody overnight at 4° C followed by washes and reaction with a 1:20,000 dilution of IRDye™800 conjugated Rb-a-Goat IgG [H&L] (code 605-432-013) for 45 min at room temperature. LICOR's Odyssey® Infrared Imaging System was used to scan and process the image. Other detection systems will yield similar results.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.