

### Certificate of Analysis

**Product:** Affinity Purified Anti-p47 ING3 (Goat)

**Code:** 600-101-283

**Lot #:** 16522

**Size:** 100 µg

**Physical State:** Liquid (sterile filtered)

**Antibody Concentration:** 1.10 mg/ml (by UV absorbance at 280 nm)

**Buffer:** 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

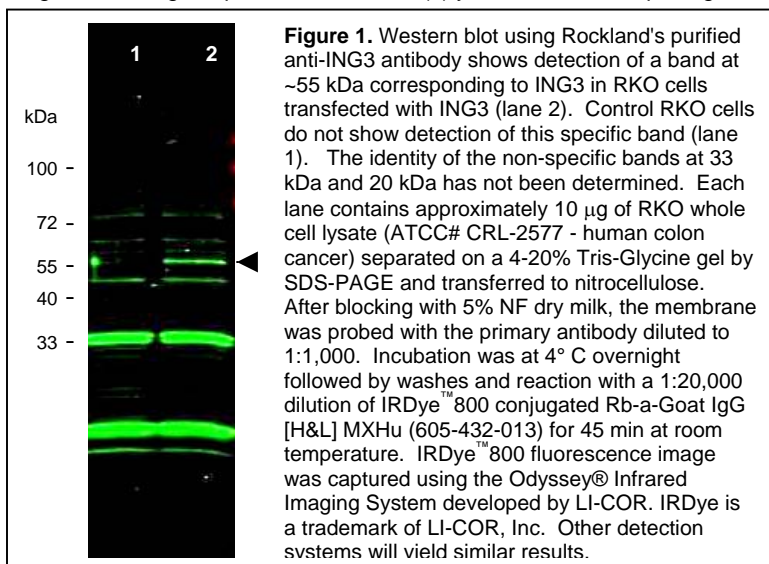
**Stabilizer:** None

**Preservative:** 0.01% (w/v) Sodium Azide

**Storage Conditions:** Store vial at -20° C prior to opening. Dilute only prior to immediate use. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Expiration date is one (1) year from date of opening.

**Background Information:** 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.

**Application Note(s):** 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.



**Recommended Dilutions:**

<b>ELISA</b>	1:10,000 - 1:40,000
<b>WESTERN BLOT</b>	1:200 - 1:2,000
<b>IF MICROSCOPY</b>	User Optimized
<b>OTHER APPLICATIONS</b>	User Optimized

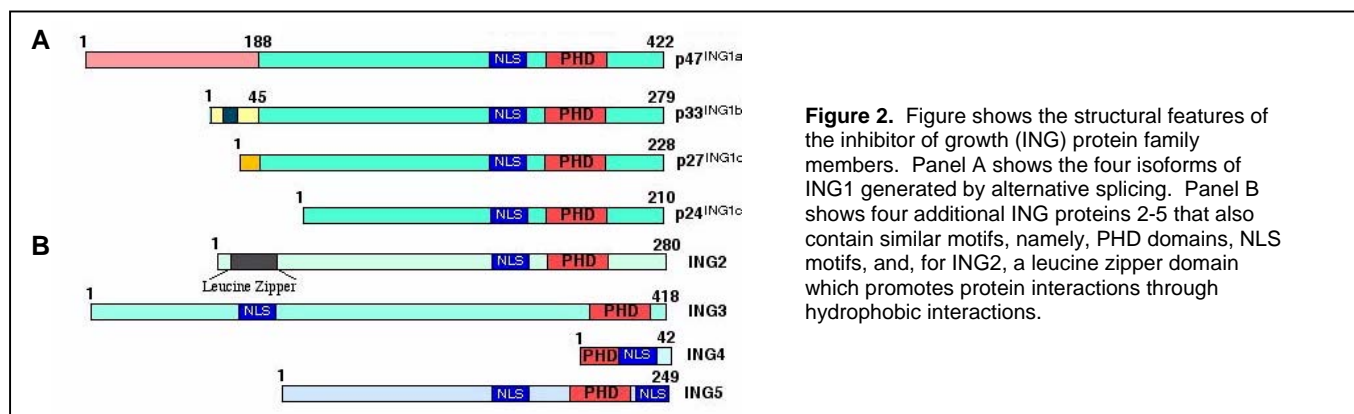
**Purity and Specificity:** This is an affinity-purified antibody produced by immunoaffinity chromatography using the immunizing peptide after immobilization to a solid phase. Reactivity occurs against human p47 ING3 protein. The sequence is not present in isoforms 2 and 3 (see below). However, 100% 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.

**Protein Sequence:** Human p47 ING3 isoform 1, 418 aa, predicted MW 46.7 kDa

1	mlyledylem	ieqlpmdlrd	rftemremdl	qvqnamdqle	qrvseffmna	kknkpewree
61	qmasikkddy	kaledadekv	qlanqjydlv	drhrlkldqe	lakfkmelea	dnagiteile
121	rrsleldtps	qpvnnhhahs	htpvckrkyn	ptshhttdh	ipekfkfkea	llsttsdas
181	kentlgcrnn	nstassnnay	nvnsqqplgs	ynigslssgt	gagaitmaaa	qavqataqmk
241	egrrtsslka	syefaknndf	qlgkefsmar	etvgyssssa	lmtltqnas	ssaadsrgr
301	ksknnnksss	qqssssssss	slsscsssst	vvqeisqqt	vvpesdsnsq	vdwtydpnep
361	rycinqvsv	gemvgcdnqd	cpiewfhygc	vglteapkgk	wycpqctaam	krrgrsrhk

**Immunogen:** This affinity purified antibody was prepared from whole Goat serum produced by repeated immunizations with a synthetic peptide corresponding aa 294-304 of Human ING3 protein (Inhibitor of growth family, member 3). This sequence only shows homology to isoform 1 for ING3.

**Relevant Link(s):** Swiss Prot: [Q9HC99](#) NCBI Link [NP\\_061944](#) (isoform 1) or [AAG12172](#)



### General References:

Nagashima, M., Shiseki, M., Pedoux, R.M., Okamura, S., Kitahama-Shiseki, M., Miura, K., Yokota, J. and Harris, C.C. (2003) A novel PHD-finger motif protein, p47ING3, modulates p53-mediated transcription, cell cycle control, and apoptosis. *Oncogene* **22** (3), 343-350.

Gunduz, M., et al. (2002) Allelic loss and reduced expression of the ING3, a candidate tumor suppressor gene at 7q31, in human head and neck cancers. *Oncogene* **21** (28), 4462-4470.

He, G.H., Helbing, C.C., Wagner, M.J., Sensen, C.W. and Riabowol, K. (2005) Phylogenetic Analysis of the ING Family of PHD Finger Proteins. *Mol Biol Evol* **22**(1), 104-116.

Feng, X., Hara, Y. and Riabowol, K. (2002) Different HATS of the ING1 gene family. *Trends Cell Biol*:**12**(11), 532-538.

### Related Products:

#600-101-282	Affinity Purified Anti-Human p33 ING1 (Goat)
#600-101-283	Affinity Purified Anti-Human p47 ING3 (Goat)
#600-101-284	Affinity Purified Anti-Human p29 ING4 (Goat)
#600-101-285	Affinity Purified Anti-Human p28 ING5 (Goat)
#600-101-286	Affinity Purified Anti-Human p32 ING2 (Goat)
#605-703-125	Peroxidase Conjugated Affinity Purified Anti-GOAT IgG (H&L) (DONKEY) MX Ch GP Ham Hs Ms Rb & Rt Serum Proteins
#605-732-125	IRDye800 Conjugated Affinity Purified Anti-GOAT IgG (H&L) (DONKEY) MX Ch GP Ham Hs Ms Rb & Rt Serum Proteins
#MB-070	Blocking Buffer for Fluorescent Western Blotting
#KIA-004	<b>MaxTag</b> <sup>TM</sup> Anti-Goat IgG Kit for Immunoblotting

**USDA Certification:** 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.

**Note:** 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.