

Datasheet for 600-401-GU2**KLF4 Antibody****Overview**

Description:	Anti-KLF4 (RABBIT) Antibody - 600-401-GU2
Item No.:	600-401-GU2
Size:	100 µg
Applications:	ELISA, IF, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background: KLF4 belong to the Kruppel like factors/Zinc fingers C2H2-type family. This gene encodes a protein that belongs to the Kruppel family of transcription factors. KLF4 can act both as activator and as repressor. It can bind the 5-CACCC-3 core sequence, the promoter region of its own gene, and can activate its own transcription. KLF4 regulates the expression of key transcription factors during embryonic development, playing an important role in maintaining embryonic stem cells, and in preventing their differentiation. This protein is required for normal development of the barrier function of skin postnatal, maintenance of the ocular surface, function in skeletal and kidney development, and thought to control the G1-to-S transition of the cell cycle following DNA damage by mediating the tumor suppressor gene p53. KLF4 may be associated with diseases such as Venous Hemangioma, Skin Squamous Cell Carcinoma, and pediatric lymphoma. Anti-KLF4 Antibody is useful for researchers interested in Peptide hormone metabolism, Stem Cell Differentiation Pathway Research, Wnt/Notch Pathway Research, and Cancer Research.

Synonyms:	rabbit anti-KLF4 antibody, KLF-4 Antibody, Krueppel-like factor 4, Epithelial zinc finger protein EZF, EZF, Gut-enriched krueppel-like factor, GKLF, KLF 4
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	KLF4
-------------------	------

Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-KLF4 antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a N-Term portion of human KLF4 conjugated to Keyhole Limpet Hemocyanin (KLH).
Purity/Specificity:	This affinity purified antibody is directed against human KLF4. This product was affinity purified from monospecific antiserum by immunoaffinity purification. Blast analysis of the sequence of the immunogen shows 100% identity with human and 93% identity to mouse.
Relevant Links:	<ul style="list-style-type: none">• UniProtKB - O43474• NCBI - NP_001300981.1• GeneID - 9314

Application Details

Tested Applications:	ELISA, IF, WB
Application Note:	Anti-KLF4 Antibody has been tested in Western Blot, ELISA, and Immunofluorescence. Expect a band at ~54.7 kDa in western blot using appropriate lysates. Positive control whole cell lysates NCCIT and PC3 @ 1µg/mL for WB; and PC3 with PFA at 10µg/mL in IF. Although not tested, this antibody is likely functional in immunohistochemistry, flow cytometry, and immunoprecipitation.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	5 µg/ml
FC:	User Optimized
IF:	10µg/mL
IHC:	1:200
IP:	User Optimized
WB:	1 ug/ml

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.05 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

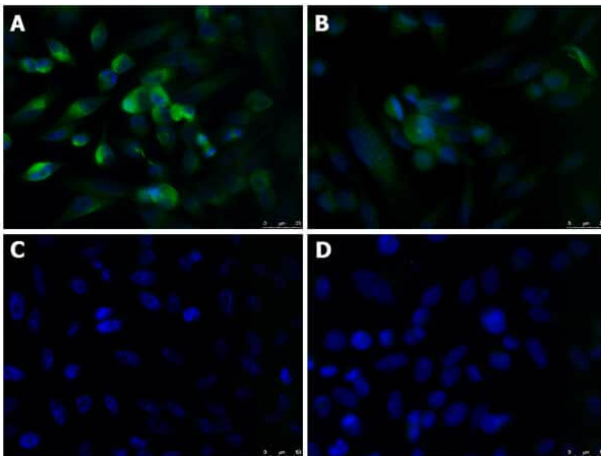
Shipping & Handling

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.

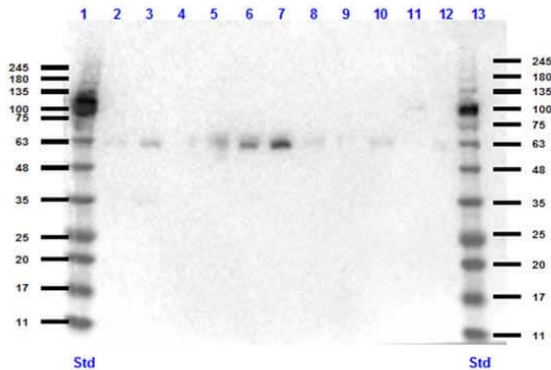
Expiration: Expiration date is one (1) year from date of receipt.

Images

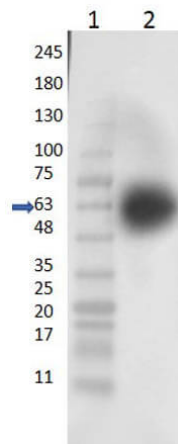


Immunofluorescence Microscopy

Immunofluorescence Microscopy of Rabbit anti-KLF4 antibody. Tissue: PC-3. Fixation: 0.5% PFA [A,C]. 0.5% MeOH [B, D]. Antigen retrieval: not required. Primary antibody: KLF4 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Anti-RABBIT IgG DyLight™ 488 Conjugated Preadsorbed (p/n 611-741-127) at 5 µg/ml for 1 h at RT. Localization: cytoplasmic and nuclear Staining: Target as green fluorescent signal with DAPI (blue) nuclear counterstain.


Western Blot

Western Blot of Rabbit anti-KLF4 antibody. Lane 1: MW ladder (opal pre-stained) p/n (MB-210-0500). Lane 2: U-87 WCL (p/n W09-001-GX2). Lane 3: C2C12 WCL (p/n W10-001-GL2). Lane 4: NIH/3T3 WCL (p/n W10-000-358). Lane 5: THP-1 WCL (p/n W09-001-GX1). Lane 6: J774A.1 WCL (p/n W10-001-GX3). Lane 7: PC-3 WCL (p/n W09-001-GV6). Lane 8: HT-29 WCL (p/n W09-001-BS0). Lane 9: Mouse colon (W10-000-GZ1). Lane 10: A549 WCL (p/n W09-001-372). Lane 11: MOLT-4 WCL (p/n W09-001-GK2). Lane 12: HeLa WCL (p/n W09-001-364). Lane 13: MW ladder (opal pre-stained) p/n (MB-210-0500). Load: 10 µg per lane. Primary antibody: KLF4 antibody at 1:1000 for overnight at 4°C. Secondary antibody: rabbit secondary HRP antibody (p/n 611-103-122) at 1:70,000 for 1 hr at RT. Block: 5% BLOTTO (p/n B501-0500) 30 min at RT. Predicted/Observed size: ~55 kDa for KLF4.


Western Blot

Western Blot of Rabbit Anti-KLF4 Antibody. Lane 1: Opal Prestained Molecular Weight Ladder (p/n MB-210-0500). Lane 2: NCCIT Whole Cell Lysate. Load: 30µg lysate. Primary Antibody: Rabbit Anti-KLF4 at 1µg/mL overnight at 4°C. Secondary Antibody: Goat Anti-Rabbit HRP Antibody (p/n 611-103-122) at 1:10,000 at RT for 1hr. Block: BLOTTO (p/n B501-0500). Predicted/Observed size: ~55 kDa for KLF4.

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.