

Datasheet for 200-301-CF0**KLF4 Antibody [4G6E11]****Overview**

Description:	Anti-KLF4 (MOUSE) Antibody - 200-301-CF0
Item No.:	200-301-CF0
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Mouse

Product Details**Background:**

KLF4 is a transcription factor that functions as both a transcriptional activator and repressor to regulate proliferation and differentiation of multiple cell types. The role of KLF4 in embryonic development suggested that it might be useful in the creation of stem cells that might be useful in cell replacement therapies in the treatment of several degenerative diseases. Artificial stem cells, termed induced pluripotent stem (iPS) cells, can be created by expressing KLF4 and the transcription factors POU5F1, Sox2, and Lin28 along with c-Myc in mouse fibroblasts. More recently, experiments have demonstrated that iPS cells could be generated using expression plasmids expressing KLF4, Sox2, POU5F1 and c-Myc, eliminating the need for virus introduction, thereby addressing a safety concern for potential use of iPS cells in regenerative medicine. KLF4 interacts directly with POU5F1 and Sox2 in iPS and ES cells and activates the target gene NANOG.

Synonyms:	KLF4 Antibody [4G6E11] , EZF, GKLF
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	[4G6E11]
Format:	IgG1

Target Details

Gene Name:	KLF4
Reactivity:	Human, Mouse, Rat

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-KLF4 antibody was produced in mice by repeated immunizations with a 20 amino acid synthetic peptide near the C-terminus of human KLF4.
Purity/Specificity:	Anti-KLF4 Monoclonal Antibody is Protein A purified. At least three isoforms of KLF4 are known to exist; this antibody will detect all three. KLF4 antibody will not cross-react with other Kruppel-like family members.
Relevant Links:	• UniProtKB - O43474 • NCBI - NP_001300981.1 • GenelD - 9314

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-KLF4 Antibody has been tested for use in ELISA and Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 55 kDa in Western Blots of specific cell lysates and tissues. Validated in mouse samples. All other applications and species not yet tested.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
WB:	1 µg/mL

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

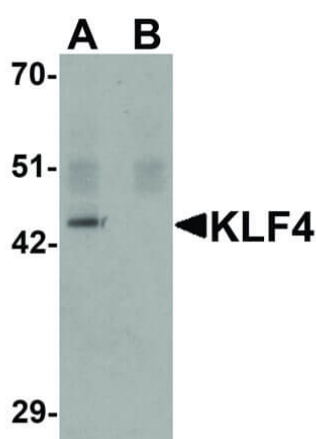
Shipping & Handling

Shipping Condition:	Dry Ice
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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

Western Blot of Mouse anti-KLF4 antibody. Lane A: mouse liver tissue lysate in the absence of blocking peptide. Lane B: mouse liver tissue lysate in the presence of blocking peptide. Primary antibody: KLF4 antibody at 1 µg/mL overnight at 4°C. Secondary antibody: Mouse HRP secondary antibody. Block: 5% BLOTTO. Predicted/Observed size: 51 kDa, 44 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.