

Rabbit KLF4 Polyclonal Antibody | anti-KLF4 antibody

Anti-KLF4 Antibody

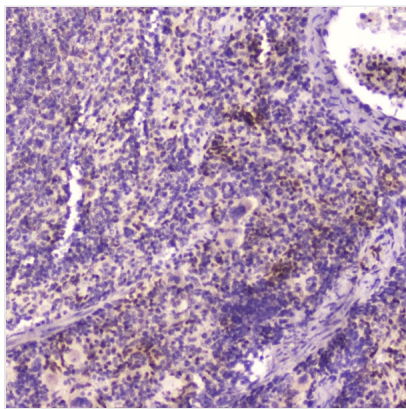
CATALOG # AAA124891	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

KLF4; Polyclonal Antibody; Anti-KLF4 Antibody; Krueppel-like factor 4; Epithelial zinc finger protein EZF; Gut-enriched krueppel-like factor; EZF; GKLF; Kruppel-like factor 4 (gut); anti-KLF4 antibody

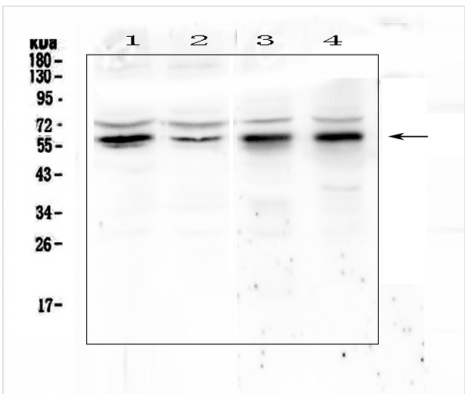
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	No cross reactivity with other proteins.
Purity/Purification	Immunogen Affinity Purified
Form/Format	Lyophilized
Sequence Length	479
Applicable Applications for anti-KLF4 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence of human KLF4 (EKTLRQAGAPNNRWREELSHMKRLPPVLPGRPYDLA).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Relevant Detection Systems	It is recommended to use an Enhanced Chemiluminescent Kit with anti-Rabbit IgG for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit for IHC-P.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



IHC (Immunohistochemistry)

Figure 3. IHC analysis of KLF4 using anti-KLF4 antibody. KLF4 was detected in paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/mL rabbit anti-KLF4 antibody. KLF4 was detected in paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/mL rabbit anti-KLF4 Antibody overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of KLF4 using anti-KLF4 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: human COLO-320 whole cell lysates, Lane 3: rat stomach tissue lysates, Lane 4: rat testis tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-KLF4 antigen affinity purified polyclonal antibody at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for KLF4 at approximately 60KD. The expected band size for KLF4 is at 55KD.

ADDITIONAL INFORMATION

Related Product Information for anti-KLF4 antibody	Description: Rabbit IgG polyclonal antibody for KLF4 detection. Tested with WB, IHC-P in Human; Mouse; Rat. Background: Kruppel-like factor 4, also known as EZF or GKLF, is a protein that in humans is encoded by the KLF4 gene. This gene is mapped to 9q31.2. KLF4 gene encodes a member of the Kruppel family of transcription factors. This gene plays an important role in maintaining embryonic stem cells, and in preventing their differentiation. It is required for establishing the barrier function of the skin and for postnatal maturation and maintenance of the ocular surface. This gene involved in the differentiation of epithelial cells and may also function in skeletal and kidney development.
References	1. Moore, D. L., Blackmore, M. G., Hu, Y., Kaestner, K. H., Bixby, J. L., Lemmon, V. P., Goldberg, J. L. KLF family members regulate intrinsic axon regeneration ability. Science 326: 298-301, 2009. 2. Patel, S., Xi, Z. F., Seo, E. Y., McGaughey, D., Segre, J. A. Klf4 and corticosteroids activate an overlapping set of transcriptional targets to accelerate in utero epidermal barrier acquisition. Proc. Nat. Acad. Sci. 103: 18668-18673, 2006. 3. Wang, H., Yang, L., Jamaluddin, M. S., Boyd, D. D. The Kruppel-like KLF4 transcription factor, a novel regulator of urokinase receptor expression, drives synthesis of this binding site in colonic crypt luminal surface epithelial cells. J. Biol. Chem. 279: 22674-22683, 2004.

NCBI AND UNIPROT INFORMATION

NCBI GI #	930697457
NCBI GeneID	9314
NCBI Accession #	NP_001300981.1
NCBI GenBank Nucleotide #	NM_001314052.1
UniProt Accession #	O43474; P78338; Q5T3J8; Q5T3J9; Q8N717; Q9UNP3; B2R8S4; B3KT79; L0R3I6; L0R4N5
Molecular Weight	51,076 Da
NCBI Official Full Name	Krueppel-like factor 4 isoform 1
NCBI Official Synonym Full Names	Kruppel like factor 4

NCBI Official Symbol	KLF4
NCBI Official Synonym Symbols	EZF; GKLF
NCBI Protein Information	Krueppel-like factor 4
UniProt Protein Name	Krueppel-like factor 4
UniProt Gene Name	KLF4
UniProt Synonym Gene Names	EZF; GKLF

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/klf4-antibody-immunohistochemistry-western-blot-elisa/124891>