

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse KLF4 in direct ELISAs and Western blots. In these formats, approximately 10% cross-reactivity with recombinant human (rh) KLF4 is observed, and less than 2% cross-reactivity with rhKLF2 and rhKLF5 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse KLF4 Ala11-Phe483 Accession # Q60793
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

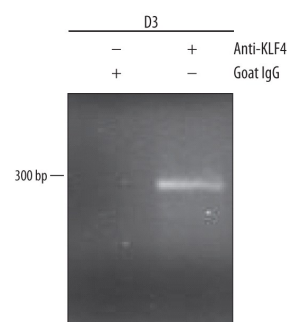
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse KLF4
Chromatin Immunoprecipitation (ChIP)	5 µg/5 x 10 ⁶ cells	See Below
Immunocytochemistry	5-15 µg/mL	See Below

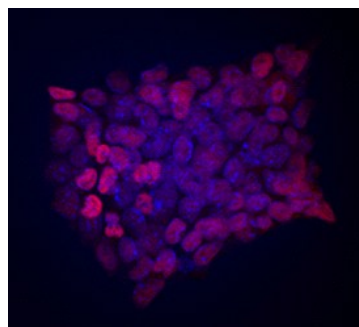
DATA

Chromatin Immunoprecipitation (ChIP)



Detection of KLF4-regulated Genes by Chromatin Immunoprecipitation. D3 mouse embryonic stem cell line was fixed using formaldehyde, resuspended in lysis buffer, and sonicated to shear chromatin. KLF4/DNA complexes were immunoprecipitated using 5 µg Goat Anti-Mouse KLF4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3158) or control antibody (Catalog # AB-108-C) for 15 minutes in an ultrasonic bath, followed by Biotinylated Anti-Goat IgG Secondary Antibody (Catalog # BAF109). Immunocomplexes were captured using 50 µL of MagCollect Streptavidin Ferrofluid (Catalog # MAG999) and DNA was purified using chelating resin solution. The *B2R* promoter was detected by standard PCR.

Immunocytochemistry



KLF4 in D3 Mouse Cell Line. KLF4 was detected in immersion fixed D3 mouse embryonic stem cell line using Mouse KLF4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3158) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

KLF4 belongs to the KLF family of transcription factors that regulate several cell functions. It is highly expressed in differentiated epithelial cells of the gastrointestinal tract. Human and mouse KLF4 share 91% amino acid sequence homology.