

KLF6 (R-173): sc-7158

BACKGROUND

The krüppel zinc finger transcription factor was initially identified in *Drosophila* as a segmentation gene. The mammalian family of krüppel-type zinc finger transcription factors comprise a conserved family of DNA-binding proteins that are important in developmental regulation. The krüppel-like factor 6 (KLF6) protein is a nuclear DNA-binding protein. KLF6 reduces cell proliferation by upregulating p21 in a p53-independent manner. KLF6 is also known as transcription factor ZF9, B cell derived 1 (BCD1), and core promoter element-binding protein (COPEB). KLF6 is predominantly expressed in the placenta but is also present in spleen, thymus, prostate, testis, small intestine and colon. In placenta, KLF6, KLF4 and pregnancy glycoprotein are co-expressed in the same cell types of placenta villi and membranes. The gene encoding human KLF6 maps to chromosome 10p15.1, and it is mutated in a subset of human prostate cancer.

CHROMOSOMAL LOCATION

Genetic locus: KLF6 (human) mapping to 10p15.1; Klf6 (mouse) mapping to 13 A1.

SOURCE

KLF6 (R-173) is a rabbit polyclonal antibody raised against amino acids 28-201 of KLF6 of rat origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-7158 X, 200 µg/0.1 ml.

APPLICATIONS

KLF6 (R-173) is recommended for detection of KLF6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); may cross-react with KLF7.

KLF6 (R-173) is also recommended for detection of KLF6 in additional species, including equine, canine, bovine and porcine.

KLF6 (R-173) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Suitable for use as control antibody for KLF6 siRNA (h): sc-38021, KLF6 siRNA (m): sc-38021, KLF6 shRNA Plasmid (h): sc-38021-SH, KLF6 shRNA Plasmid (m): sc-38021-SH, KLF6 shRNA (h) Lentiviral Particles: sc-38021-V and KLF6 shRNA (m) Lentiviral Particles: sc-38021-V.

Positive Controls: KLF6 (h2): 293T Lysate: sc-370294.

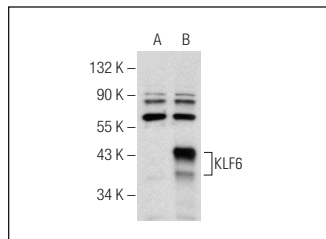
RESEARCH USE

For research use only, not for use in diagnostic procedures.

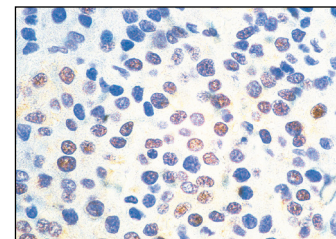
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



KLF6 (R-173): sc-7158. Western blot analysis of KLF6 expression in non-transfected: sc-117752 (A) and human KLF6 transfected: sc-370294 (B) 293T whole cell lysates.



KLF6 (R-173): sc-7158. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human liver carcinoma tissue showing nuclear localization.

SELECT PRODUCT CITATIONS

- Blanchon, L., et al. 2001. Co-localization of KLF6 and KLF4 with pregnancy-specific glycoproteins during human placenta development. *Mech. Dev.* 105: 185-189.
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- Lee, U.E., et al. 2010. Tumor suppressor activity of KLF6 mediated by downregulation of the PTTG1 oncogene. *FEBS Lett.* 584: 1006-1010.
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- Gehrau, R.C., et al. 2010. Nuclear expression of KLF6 tumor suppressor factor is highly associated with overexpression of ERBB2 oncoprotein in ductal breast carcinomas. *PLoS ONE* 5: e8929.
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- Ren, Y.R., et al. 2011. Structural analysis of the cancer-specific promoter in mesothelin and in other genes overexpressed in cancers. *J. Biol. Chem.* 286: 11960-11969.
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Try **KLF6 (E-10): sc-365633** or **KLF6 (2F5): sc-134374**, our highly recommended monoclonal alternatives to KLF6 (R-173). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **KLF6 (E-10): sc-365633**.