

KLF8 (D-16): sc-69294

BACKGROUND

The Krüppel-type zinc finger transcription factors comprise a conserved family of DNA binding proteins that are important in developmental regulation. The Krüppel zinc finger transcription factor was initially identified in *Drosophila* as a segmentation gene. Krüppel-like factor 8 (KLF8), also called basic Krüppel-like factor 3 and zinc finger protein 741, is a 359 amino acid transcriptional repressor that binds CACCC elements in DNA and activates or represses their target genes in a context-dependent manner. KLF8 is expressed ubiquitously in the nucleus of many cell types and its expression is elevated in several human cancers. KLF8 is post-translationally modified and negatively regulated by sumoylation via SUMO-1, SUMO-2 or SUMO-3. Mutation of the sumoylation site, Lysine 67, to Arginine 67 enhances the ability of KLF8 to repress or activate its target promoters.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: KLF8 (human) mapping to Xp11.21; Klf8 (mouse) mapping to X F3.

SOURCE

KLF8 (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of KLF8 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-69294 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-69294 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

KLF8 (D-16) is recommended for detection of KLF8 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

KLF8 (D-16) is also recommended for detection of KLF8 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for KLF8 siRNA (h): sc-75390, KLF8 siRNA (m): sc-75391, KLF8 shRNA Plasmid (h): sc-75390-SH, KLF8 shRNA Plasmid (m): sc-75391-SH, KLF8 shRNA (h) Lentiviral Particles: sc-75390-V and KLF8 shRNA (m) Lentiviral Particles: sc-75391-V.

KLF8 (D-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of KLF8: 39 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **KLF8 (12D2): sc-134375**, our highly recommended monoclonal alternative to KLF8 (D-16).