

TGIF2 (S-20): sc-54688

BACKGROUND

TGIF2 (TGF β -induced factor homeobox 2), also called 5'-TG-3'-interacting factor 2, is a widely expressed protein with predominant expression in kidney, heart and testis, and it belongs to the TALE/TGIF homeobox family. Localizing to the nucleus, TGIF2 contains one homeobox DNA-binding domain and is believed to function as a transcriptional repressor. Similar to the closely related protein TGIF, TGIF2 recruits histone deacetylases (HDACs) to TGF β -responsive genes, thereby mediating their transcriptional repression. Specifically, TGIF2 interacts with HDAC1 and the transcriptional modulator Smad3. Mutations in the gene encoding TGIF2 can result in holoprosencephaly, a disorder characterized by the underdevelopment of the prosencephalon. In addition, TGIF2 is overexpressed in some ovarian cancers, suggesting a possible role of TGIF2 in carcinogenesis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TGIF2 (human) mapping to 20q11.23; Tgif2 (mouse) mapping to 2 H1.

SOURCE

TGIF2 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TGIF2 of human origin.

RESEARCH USE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-54688 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-54688 X, 200 μ g/0.1 ml.

APPLICATIONS

TGIF2 (S-20) is recommended for detection of TGIF2 of mouse, rat 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).

TGIF2 (S-20) is also recommended for detection of TGIF2 in additional species, including canine.

Suitable for use as control antibody for TGIF2 siRNA (h): sc-63123, TGIF2 siRNA (m): sc-63124, TGIF2 shRNA Plasmid (h): sc-63123-SH, TGIF2 shRNA Plasmid (m): sc-63124-SH, TGIF2 shRNA (h) Lentiviral Particles: sc-63123-V and TGIF2 shRNA (m) Lentiviral Particles: sc-63124-V.

TGIF2 (S-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TGIF2: 30 kDa.

Positive Controls: JAR cell lysate: sc-2276, KNRK whole cell lysate: sc-2214 or mouse liver extract: sc-2256.

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.