

ALF (N-20): sc-68947

BACKGROUND

ALF (TFIIA α/β like factor), also known as GTF2A1L (general transcription factor IIA 1-like), is a nuclear and cytoplasmic protein that is specifically expressed in haploid spermatids in the testis. ALF is believed to play a role in spermatogenesis, functioning as a transcription factor, and is related to the large α/β subunit of TFIIA, existing as the germ cell-specific paralog. Similar to TFIIA- α/β , ALF associates with the smaller TFIIA subunit, TFIIA- γ , and functions to stabilize the interaction between TBP and DNA by binding directly to TBP and the DNA (at the TATA box), thus forming a TBP/ALF/TATA complex which mediates the transcriptional output of a gene. Low expression levels of ALF have been associated with abnormal spermatogenesis and male infertility, further implying a role for ALF in spermatogenic cell function. The transcriptional expression of ALF appears to be regulated by DNA methylation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GTF2A1L (human) mapping to 2p16.3; Gtf2a1l (mouse) mapping to 17 E4.

SOURCE

ALF (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ALF of human origin.

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-68947 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-68947 X, 200 μ g/0.1 ml.

APPLICATIONS

ALF (N-20) is recommended for detection of ALF 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).

ALF (N-20) is also recommended for detection of ALF in additional species, including equine, canine and bovine.

Suitable for use as control antibody for ALF siRNA (h): sc-72482, ALF siRNA (m): sc-72483, ALF shRNA Plasmid (h): sc-72482-SH, ALF shRNA Plasmid (m): sc-72483-SH, ALF shRNA (h) Lentiviral Particles: sc-72482-V and ALF shRNA (m) Lentiviral Particles: sc-72483-V.

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

Molecular Weight of ALF: 53 kDa.

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.

RESEARCH USE

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

PROTOCOLS

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