SANTA CRUZ BIOTECHNOLOGY, INC.

CstF-50 (D-15): sc-13658

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Polyadenylation of mRNA precursors is a two-step reaction that requires multiple protein factors. The first step, endonucleolytic cleavage of polyadenylation substrates, requires CstF (cleavage stimulation factor), a heterotrimer that is composed of three distinct subunits. Heterotrimeric CstF recognizes GU and U-rich sequences located downstream of the poly-adenylation site on RNA. The shortest CstF subunit shares extensive homology with mammalian G protein β-subunits and has a transducin repeat domain, which is a 44 amino acid-long sequence that is repeated 7 times. CstF-50 interacts with the nuclear protein BARD1 (BRCA1-associated RING domain protein) and inhibits polyadenylation *in vitro*. CstF-50 may also be responsible for the interaction of the heterotrimeric CstF complex with other polyadenylation and 3'-end cleavage factors to form a stable complex on the pre-mRNA.

CHROMOSOMAL LOCATION

Genetic locus: CSTF1 (human) mapping to 20q13.2; Cstf1 (mouse) mapping to 2 H3.

SOURCE

CstF-50 (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CstF-50 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-13658 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

CstF-50 (D-15) is recommended for detection of CstF-50 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CstF-50 is also recommended for detection of CstF-50 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CstF-50 siRNA (h): sc-37753, CstF-50 siRNA (m): sc-37754, CstF-50 shRNA Plasmid (h): sc-37753-SH, CstF-50 shRNA Plasmid (m): sc-37754-SH, CstF-50 shRNA (h) Lentiviral Particles: sc-37753-V and CstF-50 shRNA (m) Lentiviral Particles: sc-37754-V.

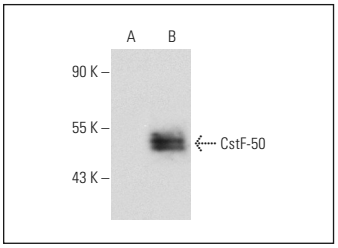
Molecular Weight of CstF-50: 55 kDa.

Positive Controls: CstF-50 (m): 293T Lysate: sc-126673, CstF-50 (h2): 293T Lysate: sc-175903 or SK-BR-3 nuclear extract: sc-2134.

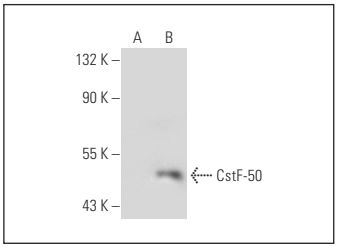
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



CstF-50 (D-15): sc-13658. Western blot analysis of CstF-50 expression in non-transfected: sc-117752 (**A**) and human CstF-50 transfected: sc-175903 (**B**) 293T whole cell lysates.



CstF-50 (D-15): sc-13658. Western blot analysis of CstF-50 expression in non-transfected: sc-117752 (**A**) and mouse CstF-50 transfected: sc-126673 (**B**) 293T whole cell lysates.

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.

MONOS Satisfaction Guaranteed

Try **CstF-50 (A-5): sc-393260** or **CstF-50 (G-3): sc-393962**, our highly recommended monoclonal alternatives to CstF-50 (D-15).