

Rrn3 (E-20): sc-11804

BACKGROUND

In eukaryotes, ribosomal RNA genes are transcribed by RNA polymerase (Pol I). In *Saccharomyces cerevisiae*, transcription of rRNA genes requires at least three transcription factors, which include the two multisubunit factors, Core factor and UAF that function in the assembly of the preinitiation complex. The third factor, Rrn3, functions as a single subunit and is not required for the preinitiation complex assembly. Unlike other Pol I transcription factors, Rrn3 is functionally conserved between yeast and mammals as an rRNA gene transcription regulator. Human Rrn3 is 21% homologous to the yeast Rrn3 protein and is a member of a conserved gene family spanning the fungi, plant and animal kingdoms. hRrn3 is highly expressed in the lung, retina, thymus, and prostate. Rrn3 may be identical to the transcription factor TIF-1A, since both TIF-1A and Rrn3 associate with pol I and their activities are growth rate dependent.

CHROMOSOMAL LOCATION

Genetic locus: RRN3 (human) mapping to 16p13.11.

SOURCE

Rrn3 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Rrn3 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-11804 P, (100 µg 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-11804 X, 200 µg/0.1 ml.

APPLICATIONS

Rrn3 (E-20) is recommended for detection of Rrn3 of 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).

Rrn3 (E-20) is also recommended for detection of Rrn3 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Rrn3 siRNA (h): sc-106866, Rrn3 shRNA Plasmid (h): sc-106866-SH and Rrn3 shRNA (h) Lentiviral Particles: sc-106866-V.

Rrn3 (E-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of Rrn3: 74 kDa.

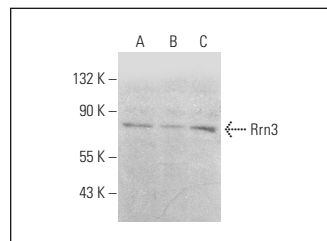
Molecular Weight (observed) of Rrn3: 70 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HeLa whole cell lysate: sc-2200 or K-562 whole cell lysate: sc-2203.

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



Rrn3 (E-20): sc-11804. Western blot analysis of Rrn3 expression in Jurkat (A), HeLa (B) and K-562 (C) whole cell lysates.

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.


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Try **Rrn3 (D-9): sc-390464**, our highly recommended monoclonal alternative to Rrn3 (E-20).