

PTRF (F-20): sc-82327

BACKGROUND

The termination of transcription by RNA polymerase I (Pol I) requires the involvement of several proteins, including TTF-1 (thyroid transcription factor-1) which pauses transcription, thus allowing the Pol I complex to dissociate and release the subsequent pre-rRNA. PTRF (Polymerase I and transcript release factor), also known as FKSG13, is a 390 amino acid protein that is required for the dissociation of the transcription complex. Localized to various places within the cell, including the cell membrane, microsome, nucleus and cytoplasm, PTRF binds the 3' end of pre-rRNA while simultaneously interacting with Pol I and TTF-1, thus allowing the Pol I complex to release from the template. Three isoforms of PTRF are expressed due to alternative splicing events.

REFERENCES

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- Vinten, J., et al. 2005. Identification of a major protein on the cytosolic face of caveolae. *Biochim. Biophys. Acta* 1717: 34-40.
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- Chadda, R. and Mayor, S. 2008. PTRF triggers a cave in. *Cell* 132: 23-24.
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CHROMOSOMAL LOCATION

Genetic locus: PTRF (human) mapping to 17q21.2; Ptrf (mouse) mapping to 11 D.

SOURCE

PTRF (F-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PTRF 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-82327 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-82327 X, 200 µg/0.1 ml.

APPLICATIONS

PTRF (F-20) is recommended for detection of PTRF 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).

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

Suitable for use as control antibody for PTRF siRNA (h): sc-76293, PTRF siRNA (m): sc-76294, PTRF shRNA Plasmid (h): sc-76293-SH, PTRF shRNA Plasmid (m): sc-76294-SH, PTRF shRNA (h) Lentiviral Particles: sc-76293-V and PTRF shRNA (m) Lentiviral Particles: sc-76294-V.

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

Molecular Weight of PTRF: 44 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.