

eRF3a (D-13): sc-109535

BACKGROUND

eRF3a (eukaryotic peptide chain release factor subunit 3a), also known as GSPT1 (G₁ to S phase transition 1), is a 499 amino acid protein that belongs to the GTP-binding elongation factor family and is involved in the regulation of cell growth, specifically via control of translation termination. Human eRF3a shares 94% sequence identity with its mouse counterpart, suggesting a conserved function between species. The gene encoding eRF3a maps to human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic location: GSPT1 (human) mapping to 16p13.13, GSPT2 (human) mapping to Xp11.22; Gspt1 (mouse) mapping to 16 A1.

SOURCE

eRF3a (D-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of eRF3a of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-109535 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-109535 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

eRF3a (D-13) is recommended for detection of eRF3a of mouse and human origin, eRF3b of 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).

eRF3a (D-13) is also recommended for detection of eRF3a of mouse and human origin, eRF3b of human origin in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for eRF3a siRNA (m): sc-144924, eRF3a shRNA Plasmid (m): sc-144924-SH and eRF3a shRNA (m) Lentiviral Particles: sc-144924-V.

eRF3a (D-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of eRF3a: 84 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.

PROTOCOLS

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



Try **eRF3a (B-8): sc-515615**, our highly recommended monoclonal alternative to eRF3a (D-13).