

UNR (N-20): sc-79295

BACKGROUND

UNR, also known as CSDE1 (cold shock domain containing E1, RNA-binding) or NRU, is a 798 amino acid protein that localizes to the cytoplasm and contains nine CDS (cold shock) domains. Existing as a component of the multi-protein autoregulatory ribonucleoprotein complex (ARC), UNR functions as an RNA-binding protein that is required for the initiation of rhinovirus RNA translation and is thought to be involved in translationally coupled mRNA turnover. UNR is expressed as two isoforms, designated long and short, and shares over 98% amino acid identity with its rat counterpart, suggesting a conserved role between species. The gene encoding UNR maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome.

REFERENCES

1. Jeffers, M., et al. 1990. Characterization of UNR; a gene closely linked to N-ras. *Nucleic Acids Res.* 18: 4891-4899.
2. Hunt, S.L., et al. 1999. UNR, a cellular cytoplasmic RNA-binding protein with five cold-shock domains, is required for internal initiation of translation of human rhinovirus RNA. *Genes Dev.* 13: 437-448.
3. Grosset, C., et al. 2000. A mechanism for translationally coupled mRNA turnover: interaction between the poly(A) tail and a c-fos RNA coding determinant via a protein complex. *Cell* 103: 29-40.
4. Chang, T.C., et al. 2004. UNR, a new partner of poly(A)-binding protein, plays a key role in translationally coupled mRNA turnover mediated by the c-Fos major coding-region determinant. *Genes Dev.* 18: 2010-2023.
5. Cornelis, S., et al. 2005. UNR translation can be driven by an IRES element that is negatively regulated by polypyrimidine tract binding protein. *Nucleic Acids Res.* 33: 3095-3108.

CHROMOSOMAL LOCATION

Genetic locus: CSDE1 (human) mapping to 1p13.2; CSDE1 (mouse) mapping to 3 F2.2.

SOURCE

UNR (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of UNR 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-79295 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-79295 X, 200 µg/0.1 ml.

STORAGE

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

APPLICATIONS

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

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

Suitable for use as control antibody for UNR siRNA (h): sc-76808, UNR siRNA (m): sc-76809, UNR shRNA Plasmid (h): sc-76808-SH, UNR shRNA Plasmid (m): sc-76809-SH, UNR shRNA (h) Lentiviral Particles: sc-76808-V and UNR shRNA (m) Lentiviral Particles: sc-76809-V.

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

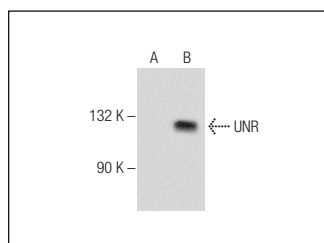
Molecular Weight of UNR: 96 kDa.

Positive Controls: UNR (h5): 293T Lysate: sc-158050 or HeLa whole cell lysate: sc-2200.

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



UNR (N-20): sc-79295. Western blot analysis of UNR expression in non-transfected: sc-117752 (A) and human UNR transfected: sc-158050 (B) 293T whole cell lysates.

RESEARCH USE

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