

RoXaN (D-16): sc-86838

BACKGROUND

RoXaN (zinc finger CCCH-type containing 7B), is a 993 amino acid protein likely involved in translational regulation whose alternative names include rotavirus 'X'-associated non-structural protein, ubiquitous tetratricopeptide containing protein RoXaN, ZC3H7B, FLJ13787, KIAA1031 or DKFZp434K0920. RoXaN localizes to the nucleus and has been identified as a novel cellular protein-binding partner for the rotavirus nonstructural protein NSP3, which is involved in rotavirus replication. RoXaN's nuclear localization is known to appear disguised upon infection with rotavirus A. Two RoXaN isoforms exist as a result of alternative splicing, and RoXaN also contains one C₂H₂-type zinc finger, three TPR repeats and four C3H1-type zinc fingers. RoXaN contains one paxillin leucine-aspartate repeat (LD) motif in addition to a coiled-coil region which assist in protein-protein interactions. The gene encoding RoXaN maps to human chromosome 22q13.2.

REFERENCES

- Vende, P., Piron, M., Castagné, N. and Poncet, D. 2000. Efficient translation of rotavirus mRNA requires simultaneous interaction of NSP3 with the eukaryotic translation initiation factor eIF4G and the mRNA 3' end. *J. Virol.* 74: 7064-7071.
- Patton, J.T. 2001. Rotavirus RNA replication and gene expression. *Novartis Found. Symp.* 238: 64-77.
- Vitour, D., Lindenbaum, P., Vende, P., Becker, M.M. and Poncet, D. 2004. RoXaN, a novel cellular protein containing TPR, LD, and zinc finger motifs, forms a ternary complex with eukaryotic initiation factor 4G and rotavirus NSP3. *J. Virol.* 78: 3851-3862.
- Harb, M., Becker, M.M., Vitour, D., Baron, C.H., Vende, P., Brown, S.C., Bolte, S., Arold, S.T. and Poncet, D. 2008. Nuclear localization of cytoplasmic poly(A)-binding protein upon rotavirus infection involves the interaction of NSP3 with eIF4G and RoXaN. *J. Virol.* 82: 11283-11293.

CHROMOSOMAL LOCATION

Genetic locus: ZC3H7B (human) mapping to 22q13.2.

SOURCE

RoXaN (D-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of RoXaN of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86838 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-86838 X, 100 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

RoXaN (D-16) is recommended for detection of RoXaN 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).

Suitable for use as control antibody for RoXaN siRNA (h): sc-76427, RoXaN shRNA Plasmid (h): sc-76427-SH and RoXaN shRNA (h) Lentiviral Particles: sc-76427-V.

RoXaN (D-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of RoXaN: 110 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.