

GOR (C-15): sc-87132

BACKGROUND

Proper DNA and RNA metabolism requires nucleases that function in DNA replication, recombination and repair, as well as in RNA processing and degradation events. REXO1 (REX1, RNA exonuclease 1 homolog) is ubiquitously expressed nuclear protein that interacts with both TCEA2 and Elongin A, and may influence transcriptional elongation. GOR, also known as REXO1L1 (REX1, RNA exonuclease 1 homolog (*S. cerevisiae*)-like 1), is a 675 amino acid exonuclease belonging to the REXO1/REXO3 family. GOR may be related to HCV infection and the anti-GOR response is suggested to reflect an HCV-associated autoimmune phenomenon. Localizing to nucleus and cytoplasm, GOR contains one exonuclease domain and is encoded by a gene that maps to human chromosome 8q21.2.

REFERENCES

1. Tran, A., et al. 1995. Anti-GOR and anti-thyroid autoantibodies in patients with chronic hepatitis C. *Clin. Immunol. Immunopathol.* 77: 127-130.
2. Quiroga, J.A., et al. 1996. Patterns of immune responses to the host-encoded GOR and hepatitis C virus core-derived epitopes with relation to hepatitis C viremia, genotypes, and liver disease severity. *J. Infect. Dis.* 173: 300-305.
3. Nelson, D.R., et al. 1996. Anti-GOR in chronic HCV patients with membranoproliferative glomerulonephritis. *J. Hepatol.* 24: 248.
4. Nakano, T., et al. 1998. Lack of anti-GOR antibody among subjects with GB virus C/hepatitis G virus RNA. *J. Med. Virol.* 55: 129-133.
5. Dennin, R.H., et al. 1998. The GOR47-1 sequence in human DNA encoding for a potential autoantigen in connection with hepatitis C—a sequence not only reserved for humans. *Z. Gastroenterol.* 36: 877-882.
6. Koike, R., et al. 2001. The GOR gene product cannot cross-react with hepatitis C virus in humans. *Clin. Exp. Immunol.* 129: 429-434.
7. Vasiljevic, N., et al. 2005. Gene similarity between hepatitis C virus and human proteins—a blood transfusion problem. *Med. Pregl.* 58: 582-586.
8. Quiroga, J.A., et al. 2007. Serum immunoglobulin G antibodies to the GOR autoepitope are present in patients with occult hepatitis C virus (HCV) infection despite lack of HCV-specific antibodies. *Clin. Vaccine Immunol.* 14: 1302-1306.

CHROMOSOMAL LOCATION

Genetic locus: REXO1L1 (human) mapping to 8q21.2.

SOURCE

GOR (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of GOR 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-87132 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GOR (C-15) is recommended for detection of GOR 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).

Suitable for use as control antibody for GOR siRNA (h): sc-77867, GOR shRNA Plasmid (h): sc-77867-SH and GOR shRNA (h) Lentiviral Particles: sc-77867-V.

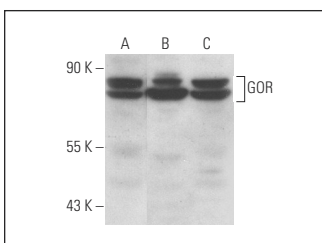
Molecular Weight of GOR: 74 kDa.

Positive Controls: SW480 cell lysate: sc-2219, U-937 cell lysate: sc-2239 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



GOR (C-15): sc-87132. Western blot analysis of GOR expression in HeLa (A), U-937 (B) and SW480 (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.