

# CGR19 (Q-20): sc-68275

## BACKGROUND

CGR19 (cell growth regulatory gene 19 protein), also known as cell growth regulator with RING finger domain protein 1 and RING finger protein 197, is a 332 amino acid protein contains one RING-type zinc finger domain. CGR19 is ubiquitously expressed, with highest levels found in testis. It has been suggested that CGR19 plays a role in regulating the cell cycle because it inhibits growth in several cell lines. The gene encoding CGR19 maps to human chromosome 14, which houses over 700 genes and comprises nearly 3.5% of the human genome. Chromosome 14 encodes the presenilin 1 (PSEN1) gene, which is one of the three key genes associated with the development of Alzheimer's disease (AD). The SERPINA1 gene is also located on chromosome 14 and, when defective, leads to the genetic disorder  $\alpha_1$ -antitrypsin deficiency, which is characterized by severe lung complications and liver dysfunction.

## REFERENCES

- Madden, S.L., Galella, E.A., Riley, D., Bertelsen, A.H. and Beaudry, G.A. 1996. Induction of cell growth regulatory genes by p53. *Cancer Res.* 56: 5384-5390.
- Katoh, M. 2001. Molecular cloning and characterization of RNF26 on human chromosome 11q23 region, encoding a novel RING finger protein with leucine zipper. *Biochem. Biophys. Res. Commun.* 282: 1038-1044.
- Gomes, I., Sharma, T.T., Edassery, S., Fulton, N., Mar, B.G. and Westbrook, C.A. 2002. Novel transcription factors in human CD34 antigen-positive hematopoietic cells. *Blood* 100: 107-119.

## CHROMOSOMAL LOCATION

Genetic locus: CGRRF1 (human) mapping to 14q22.2; Cgrrf1 (mouse) mapping to 14 C1.

## SOURCE

CGR19 (Q-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CGR19 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-68275 P, (100  $\mu$ g 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-68275 X, 200  $\mu$ g/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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

CGR19 (Q-20) is recommended for detection of CGR19 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

CGR19 (Q-20) is also recommended for detection of CGR19 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CGR19 siRNA (h): sc-62100, CGR19 siRNA (m): sc-62101, CGR19 shRNA Plasmid (h): sc-62100-SH, CGR19 shRNA Plasmid (m): sc-62101-SH, CGR19 shRNA (h) Lentiviral Particles: sc-62100-V and CGR19 shRNA (m) Lentiviral Particles: sc-62101-V.

CGR19 (Q-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

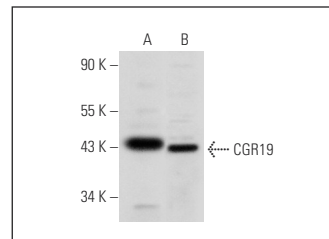
Molecular Weight of CGR19: 38 kDa.

Positive Controls: SK-BR-3 cell lysate: sc-2218 or mouse skeletal muscle extract: sc-364250.

## 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



CGR19 (Q-20): sc-68275. Western blot analysis of CGR19 expression in mouse skeletal muscle tissue extract (A) and SK-BR-3 whole cell lysate (B).

## RESEARCH USE

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