

# Glutamine-rich 2 (S-20): sc-240520

## BACKGROUND

Glutamine-rich 2 is a 1663 amino acid protein that contains almost a 400 amino acid glutamine-rich region, which is possibly involved in protein-protein interactions. There are three isoforms of Glutamine-rich 2 that are produced as a result of alternative splicing events. The gene encoding Glutamine-rich 2 maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome.

## REFERENCES

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- Shashi, V., et al. 2003. Ring chromosome 17: phenotype variation by deletion size. *Clin. Genet.* 64: 361-365.
- Barbouti, A., et al. 2004. The breakpoint region of the most common isochromosome, i(17q), in human neoplasia is characterized by a complex genomic architecture with large, palindromic, low-copy repeats. *Am. J. Hum. Genet.* 74: 1-10.
- Yamamoto, K., et al. 2008. Imatinib resistance in a novel translocation der(17)t(1;17)(q25;p13) with loss of TP53 but without BCR/ABL kinase domain mutation in chronic myelogenous leukemia. *Cancer Genet. Cytogenet.* 183: 77-81.
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- Seifert, H., et al. 2009. The prognostic impact of 17p (p53) deletion in 2272 adults with acute myeloid leukemia. *Leukemia* 23: 656-663.
- Dicker, F., et al. 2009. The detection of TP53 mutations in chronic lymphocytic leukemia independently predicts rapid disease progression and is highly correlated with a complex aberrant karyotype. *Leukemia* 23: 117-124.

## CHROMOSOMAL LOCATION

Genetic locus: QRICH2 (human) mapping to 17q25.1; Qrich2 (mouse) mapping to 11 E2.

## SOURCE

Glutamine-rich 2 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Glutamine-rich 2 of human origin.

## STORAGE

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

## 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-240520 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Glutamine-rich 2 (S-20) is recommended for detection of Glutamine-rich 2 of mouse, rat and 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); non cross-reactive with Glutamine-rich 1.

Glutamine-rich 2 (S-20) is also recommended for detection of Glutamine-rich 2 in additional species, including canine and porcine.

Suitable for use as control antibody for Glutamine-rich 2 siRNA (h): sc-93582, Glutamine-rich 2 siRNA (m): sc-145453, Glutamine-rich 2 shRNA Plasmid (h): sc-93582-SH, Glutamine-rich 2 shRNA Plasmid (m): sc-145453-SH, Glutamine-rich 2 shRNA (h) Lentiviral Particles: sc-93582-V and Glutamine-rich 2 shRNA (m) Lentiviral Particles: sc-145453-V.

Molecular Weight of Glutamine-rich 2: 181 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.

## RESEARCH USE

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

## PROTOCOLS

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