

# CUG2 (Q-14): sc-137989

## BACKGROUND

CUG2 (cancer-up-regulated gene 2 protein), also known as CENPW (centromere protein W), is an 88 amino acid nuclear protein that is up-regulated in cancer tissues. Localized specifically to the centromere, CUG2 interacts with CENP-T during establishment of centromere chromatin structure. CUG2 is also believed to act as an oncogene, with expression found in rectal, colon and stomach cancers. CUG2 is expressed in liver, ovary, pancreas and lung. The gene that encodes CUG2 maps to human chromosome 6, which makes up nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer suggesting the presence of a cancer susceptibility locus. Porphyria cutanea tarda is associated with chromosome 6 through the HFE gene which, when mutated, predisposes an individual to developing this porphyria. Notably, the PARK2 gene, which is associated with Parkinson's disease, and the genes encoding the major histocompatibility complex proteins, which are key molecular components of the immune system and determine predisposition to rheumatic diseases, are also located on chromosome 6. Stickler syndrome, 21-hydroxylase deficiency and maple syrup urine disease are also associated with genes on chromosome 6.

## REFERENCES

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## RESEARCH USE

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

## CHROMOSOMAL LOCATION

Genetic locus: CENPW (human) mapping to 6q22.32; Cenpw (mouse) mapping to 10 A4.

## SOURCE

CUG2 (Q-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CUG2 of mouse 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-137989 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-137989 X, 200 µg/0.1 ml.

## APPLICATIONS

CUG2 (Q-14) is recommended for detection of CUG2 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).

Suitable for use as control antibody for CUG2 siRNA (h): sc-95251, CUG2 siRNA (m): sc-142635, CUG2 shRNA Plasmid (h): sc-95251-SH, CUG2 shRNA Plasmid (m): sc-142635-SH, CUG2 shRNA (h) Lentiviral Particles: sc-95251-V and CUG2 shRNA (m) Lentiviral Particles: sc-142635-V.

CUG2 (Q-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of CUG2: 10 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 Blotting 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.

## 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.