## SANTA CRUZ BIOTECHNOLOGY, INC.

# C3orf14 (V-15): sc-102361



BACKGROUND

C3orf14 (chromosome 3 open reading frame 14), also known as HT021, is a 128 amino acid protein that is encoded by a gene mapping to human chromosome 3p14.2. Chromosome 3 is made up of approximately 214 million bases encoding over 1,100 genes. Notably, there is a chemokine receptor gene cluster and a variety of human cancer related loci on chromosome 3. Particular regions of the chromosome 3 short arm are deleted in many types of cancer cells. Key tumor suppressing genes on chromosome 3 encode apoptosis mediator RASSF1, cell migration regulator HYAL1 and angiogenesis suppressor SEMA3B. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

## REFERENCES

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- Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. Genomics 83: 193-202.
- 4. Darai, E., et al. 2005. Evolutionarily plastic regions at human 3p21.3 coincide with tumor breakpoints identified by the "elimination test". Genomics 86: 1-12.
- 5. Yue, Y., et al. 2005. Genomic structure and paralogous regions of the inversion breakpoint occurring between human chromosome 3p12.3 and orangutan chromosome 2. Cytogenet. Genome Res. 108: 98-105.
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- Muzny, D.M., et al. 2006. The DNA sequence, annotation and analysis of human chromosome 3. Nature 440: 1194-1198.
- Nareyeck, G., et al. 2006. Establishment and characterization of two uveal melanoma cell lines derived from tumors with loss of one chromosome 3. Exp. Eye Res. 83: 858-864.

## CHROMOSOMAL LOCATION

Genetic locus: C3orf14 (human) mapping to 3p14.2; 3830406C13Rik (mouse) mapping to 14 A1.

#### SOURCE

C3orf14 (V-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of C3orf14 of human origin.

## PRODUCT

Each vial contains 100  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-102361 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

C3orf14 (V-15) is recommended for detection of C3orf14 of mouse 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 C3orf14 siRNA (h): sc-78382, 3830406C13Rik siRNA (m): sc-108925, C3orf14 shRNA Plasmid (h): sc-78382-SH, 3830406C13Rik siRNA Plasmid (m): sc-108925-SH, C3orf14 shRNA (h) Lentiviral Particles: sc-78382-V and 3830406C13Rik siRNA (m) Lentiviral Particles: sc-108925-V.

Molecular Weight of C3orf14: 15 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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: 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<sup>™</sup> Mounting Medium: sc-24941.

## **STORAGE**

Store at 4° C, \*\*D0 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.