SANTA CRUZ BIOTECHNOLOGY, INC.

# C2orf68 (T-16): sc-242180

## BACKGROUND

C2orf68 (chromosome 2 open reading frame 68), also known as FLJ14112, FLJ35653 or MGC131675, is a 168 amino acid protein belonging to the UPF0561 family. Existing as two alternatively spliced isoforms, C2orf68 is encoded by a gene that maps to human chromosome 2q11.2. As the second largest human chromosome, chromosome 2 makes up approximately 8% of the human genome and contains 237 million bases encoding over 1,400 genes. A number of genetic diseases are linked to genes on chromosome 2. Harlequin icthyosis, a rare skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome, is related to mutations in the ALMS1 gene. Chromosome 2 contains a probable vestigial second centromere as well as vestigial telomeres, which gives credence to the hypothesis that human chromosome 2 formed as a result of an ancient fusion of two ancestral chromosomes, which are still present in modern day apes.

## REFERENCES


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4. Thomas, A.C., et al. 2006. ABCA12 is the major harlequin ichthyosis gene. J. Invest. Dermatol. 126: 2408-2413.
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8. Tabas, I. 2007. A two-carbon switch to sterol-induced autophagic death. Autophagy 3: 38-41.
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## CHROMOSOMAL LOCATION

Genetic locus: C2orf68 (human) mapping to 2p11.2; 0610030E20Rik (mouse) mapping to 6 C1.

## SOURCE

C2orf68 (T-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of C2orf68 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-242180 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

C2orf68 (T-16) is recommended for detection of C2orf68 of human origin, 0610030E20Rik of mouse origin and the corresponding rat homolog 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).

C2orf68 (T-16) is also recommended for detection of C2orf68 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for C2orf68 siRNA (h): sc-94371, 0610030E20Rik siRNA (m): sc-108118, C2orf68 shRNA Plasmid (h): sc-94371-SH, 0610030E20Rik shRNA Plasmid (m): sc-108118-SH, C2orf68 shRNA (h) Lentiviral Particles: sc-94371-V and 0610030E20Rik shRNA (m) Lentiviral Particles: sc-108118-V.

Molecular Weight of C2orf68 isoform 1: 19 kDa.

Molecular Weight of C2orf68 isoform 2: 14 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.

## 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.