# C2orf74 (C-15): sc-245725



The Power to Question

# **BACKGROUND**

C2orf74 (chromosome 2 open reading frame 74) is a 194 amino acid single pass membrane protein that is encoded by a gene that maps to human chromosome 2p15. 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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# **CHROMOSOMAL LOCATION**

Genetic locus: C2orf74 (human) mapping to 2p15; 1700093K21Rik (mouse) mapping to 11 A3.2.

# SOURCE

C2orf74 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of C2orf74 of human origin.

#### **STORAGE**

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

#### **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-245725 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

C2orf74 (C-15) is recommended for detection of C2orf74 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).

C2orf74 (C-15) is also recommended for detection of C2orf74 in additional species, including canine.

Suitable for use as control antibody for C2orf74 siRNA (h): sc-94865, 1700093K21Rik siRNA (m): sc-108502, C2orf74 shRNA Plasmid (h): sc-94865-SH, 1700093K21Rik shRNA Plasmid (m): sc-108502-SH, C2orf74 shRNA (h) Lentiviral Particles: sc-94865-V and 1700093K21Rik shRNA (m) Lentiviral Particles: sc-108502-V.

Molecular Weight of C2orf74: 22 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 or our catalog for detailed protocols and support products.

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