

# C2orf44 (K-12): sc-160991

## BACKGROUND

The second largest human chromosome, 2 consists of 237 million bases encoding over 1,400 genes and making up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2. Harlequin ichthyosis, a rare and morbid 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 due to mutations in the ALMS1 gene. Interestingly, chromosome 2 contains what appears to be a vestigial second centromere and vestigial telomeres which gives credence to the hypothesis that human chromosome 2 is the result of an ancient fusion of two ancestral chromosomes seen in modern form today in apes. The C2orf44 gene product has been provisionally designated C2orf44 pending further characterization.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: C2orf44 (human) mapping to 2p23.3; BC068281 (mouse) mapping to 12 A1.1.

## SOURCE

C2orf44 (K-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of C2orf44 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-160991 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

C2orf44 (K-12) is recommended for detection of C2orf44 of human origin, BC068281 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); non cross-reactive with other C2orf44 family members.

C2orf44 (K-14) is also recommended for detection of C2orf44 in additional species, including avian.

Suitable for use as control antibody for C2orf44 siRNA (h): sc-94557, BC068281 siRNA (m): sc-141657, C2orf44 shRNA Plasmid (h): sc-94557-SH, BC068281 shRNA Plasmid (m): sc-141657-SH, C2orf44 shRNA (h) Lentiviral Particles: sc-94557-V and BC068281 shRNA (m) Lentiviral Particles: sc-141657-V.

Molecular Weight of C2orf44 isoforms: 79/68/26 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.