

# VWC1 (Q-15): sc-244598

## BACKGROUND

VWC1, also known as VWCE (von Willebrand factor C and EGF domains), HBV X protein up-regulated gene 11 protein or URG11, is a 955 amino acid secreted protein that functions as a regulatory element during the  $\beta$ -catenin signaling pathway. Existing as two alternatively spliced isoforms, VWC1 is expressed in liver and has been shown to be upregulated in uHepG2 cells expressing Hep B xAg (hepatitis B virus X antigen). VWC1 contains four EGF-like domains, six VWFC domains, and is considered a target for prevention of hepatocarcinogenesis. The gene encoding VWC1 maps to human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

## REFERENCES

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7. Coldren, C.D., et al. 2009. Chromosomal microarray mapping suggests a role for BSX and Neurogranin in neurocognitive and behavioral defects in the 11q terminal deletion disorder (Jacobsen syndrome). *Neurogenetics* 10: 89-95.
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## CHROMOSOMAL LOCATION

Genetic locus: VWCE (human) mapping to 11q12.2; Vwce (mouse) mapping to 19 A.

## SOURCE

VWC1 (Q-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of VWC1 of human origin.

## 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-244598 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

VWC1 (Q-15) is recommended for detection of VWC1 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); non cross-reactive with VWC2.

VWC1 (Q-15) is also recommended for detection of VWC1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for VWC1 siRNA (h): sc-96303, VWCE siRNA (m): sc-155238, VWC1 shRNA Plasmid (h): sc-96303-SH, VWCE shRNA Plasmid (m): sc-155238-SH, VWC1 shRNA (h) Lentiviral Particles: sc-96303-V and VWCE shRNA (m) Lentiviral Particles: sc-155238-V.

Molecular Weight of VWC1 isoforms: 99/23 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](http://www.scbt.com) or our catalog for detailed protocols and support products.