

# C9orf91 (V-12): sc-138875

## BACKGROUND

Chromosome 9 consists of about 145 million bases and 4% of the human genome and encodes nearly 900 genes. Considered to play a role in gender determination, deletion of the distal portion of 9p can lead to development of male to female sex reversal, the phenotype of a female with a male X,Y genotype. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, is associated with the chromosome 9 gene encoding endoglin protein, ENG. Familial dysautonomia is also associated with chromosome 9 through the gene IKBKAP. Notably, chromosome 9 encompasses the largest interferon family gene cluster. Chromosome 9 is partnered with chromosome 22 in the translocation leading to the aberrant production of BCR-ABL fusion protein often found in leukemias. The C9orf91 gene product has been provisionally designated C9orf91 pending further characterization. There are three isoforms of C9orf91 that are produced as a result of alternative splicing events.

## REFERENCES

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- Burmeister, T., et al. 2007. Atypical Bcr-Abl mRNA transcripts in adult acute lymphoblastic leukemia. *Haematologica* 92: 1699-1702.
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- Hims, M.M., et al. 2007. A humanized IKBKAP transgenic mouse models a tissue-specific human splicing defect. *Genomics* 90: 389-396.
- Temtamy, S.A., et al. 2007. Phenotypic and cytogenetic spectrum of 9p trisomy. *Genet. Couns.* 18: 29-48.

## CHROMOSOMAL LOCATION

Genetic locus: C9orf91 (human) mapping to 9q32; 6330416G13Rik (mouse) mapping to 4 C1.

## SOURCE

C9orf91 (V-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of C9orf91 of human origin.

## STORAGE

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

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138875 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

C9orf91 (V-12) is recommended for detection of C9orf91 isoforms 1-3 of human origin, 6330416G13Rik of mouse origin and the corresponding rat homolog by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other C9orf family members.

Suitable for use as control antibody for C9orf91 siRNA (h): sc-92597, 6330416G13Rik siRNA (m): sc-140438, C9orf91 shRNA Plasmid (h): sc-92597-SH, 6330416G13Rik shRNA Plasmid (m): sc-140438-SH, C9orf91 shRNA (h) Lentiviral Particles: sc-92597-V and 6330416G13Rik shRNA (m) Lentiviral Particles: sc-140438-V.

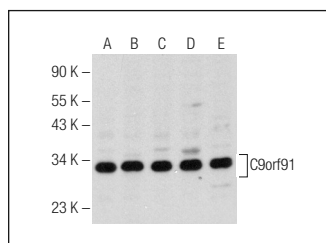
Molecular Weight of C9orf91: 38/36/38 kDa.

Positive Controls: MOLT-4 cell lysate: sc-2233, Caco-2 cell lysate: sc-2262 or Jurkat whole cell lysate: sc-2204.

## 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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: 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™ Mounting Medium: sc-24941.

## DATA



C9orf91 (V-12): sc-138875. Western blot analysis of C9orf91 expression in MOLT-4 (A), Caco-2 (B), Jurkat (C), MIA PaCa-2 (D) and BJAB (E) whole cell lysates.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.