

# DCST2 (Q-17): sc-242557

## BACKGROUND

DCST2 (DC-STAMP domain containing 2) is a 773 amino acid multi-pass membrane protein that exists as two alternatively spliced isoforms. Conserved in chimpanzee, canine, bovine, mouse, zebrafish, fruit fly, mosquito and *Caenorhabditis elegans*, DCST2 is encoded by a gene that maps to human chromosome 1q21.3. As the largest human chromosome, chromosome 1 spans 260 million base pairs that encode 3,000 genes and makes up 8% of the human genome. Hutchinson-Gilford progeria, familial adenomatous polyposis, Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are all associated with chromosome 1. A breakpoint in 1q is linked to schizophrenia, and aberrations in chromosome 1 exist in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

## REFERENCES

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4. Lans, H. and Hoeijmakers, J.H. 2006. Cell biology: aging nucleus gets out of shape. *Nature* 440: 32-34.
5. Gregory, S.G., et al. 2006. The DNA sequence and biological annotation of human chromosome 1. *Nature* 441: 315-321.
6. Hennah, W., et al. 2006. Genes and schizophrenia: beyond schizophrenia: the role of DISC-1 in major mental illness. *Schizophr. Bull.* 32: 409-416.
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8. McClintock, D., et al. 2006. Hutchinson-Gilford progeria mutant Lamin A primarily targets human vascular cells as detected by an anti-Lamin A G608G antibody. *Proc. Natl. Acad. Sci. USA* 103: 2154-2159.

## CHROMOSOMAL LOCATION

Genetic locus: DCST2 (human) mapping to 1q21.3; Dcst2 (mouse) mapping to 3 F1.

## SOURCE

DCST2 (Q-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of DCST2 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-242557 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

DCST2 (Q-17) is recommended for detection of DCST2 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 DCST1.

DCST2 (Q-17) is also recommended for detection of DCST2 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for DCST2 siRNA (h): sc-88200, DCST2 siRNA (m): sc-142906, DCST2 shRNA Plasmid (h): sc-88200-SH, DCST2 shRNA Plasmid (m): sc-142906-SH, DCST2 shRNA (h) Lentiviral Particles: sc-88200-V and DCST2 shRNA (m) Lentiviral Particles: sc-142906-V.

Molecular Weight of DCST2 isoforms 1/2: 86/72 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or A-431 whole cell lysate: sc-2201.

## 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.