

# DEPDC1 (V-14): sc-164170

## BACKGROUND

DEPDC1 (DEP domain containing 1), also known as DEP8, SDP35, DEPDC1A or DEPDC1-V2, is a 784 amino acid nuclear protein expressed in testis and up-regulated in bladder cancer cells. Containing a DEP domain and a Rho-GAP domain, DEPDC1 may play an essential role in the growth of bladder cancer cells, and is considered a novel protein target for bladder cancer therapy. Existing as 5 isoforms produced by alternative splicing events, DEPDC1 is encoded by a gene located on human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

## REFERENCES

1. Watson, M.L., et al. 1990. Genomic organization of the selectin family of leukocyte adhesion molecules on human and mouse chromosome 1. *J. Exp. Med.* 172: 263-272.
2. Blackwood, D.H., et al. 2001. Schizophrenia and affective disorders— cosegregation with a translocation at chromosome 1q42 that directly disrupts brain-expressed genes: clinical and P300 findings in a family. *Am. J. Hum. Genet.* 69: 428-433
3. Weise, A., et al. 2005. New insights into the evolution of chromosome 1. *Cytogenet. Genome Res.* 108: 217-222.
4. Gregory, S.G., et al. 2006. The DNA sequence and biological annotation of human chromosome 1. *Nature* 441: 315-321.
5. Hennah, W., et al. 2006. Genes and schizophrenia: beyond schizophrenia: the role of DISC1 in major mental illness. *Schizophr. Bull.* 32: 409-416.

## CHROMOSOMAL LOCATION

Genetic locus: DEPDC1 (human) mapping to 1p31.2; Depdc1a (mouse) mapping to 3 H4.

## SOURCE

DEPDC1 (V-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DEPDC1 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-164170 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

DEPDC1 (V-14) is recommended for detection of DEPDC1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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 DEPDC family members.

Suitable for use as control antibody for DEPDC1 siRNA (h): sc-78918, DEPDC1 siRNA (m): sc-143006, DEPDC1 shRNA Plasmid (h): sc-78918-SH, DEPDC1 shRNA Plasmid (m): sc-143006-SH, DEPDC1 shRNA (h) Lentiviral Particles: sc-78918-V and DEPDC1 shRNA (m) Lentiviral Particles: sc-143006-V.

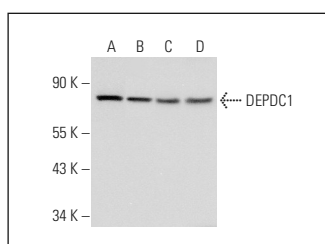
Molecular Weight of DEPDC1: 89 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136, HeLa nuclear extract: sc-2120 or NIH/3T3 nuclear extract: sc-2138.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



DEPDC1 (V-14): sc-164170. Western blot analysis of DEPDC1 expression in HEK293 (A) and T24 (B) whole cell lysates and HeLa (C) and NIH/3T3 (D) nuclear extracts.

## RESEARCH USE

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

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Try **DEPDC1 (6H1): sc-517096**, our highly recommended monoclonal alternative to DEPDC1 (V-14).