SANTA CRUZ BIOTECHNOLOGY, INC.

DCAF17 (K-13): sc-167334

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

DCAF17 (DDB1 and CUL4 associated factor 17) is a multi-pass membrane protein encoded by a gene that exhibits extreme splicing variability. DCAF17 exists as 2 major isoforms, α and β, that encode proteins of 240 and 520 amino acids respectively, with the α isoform identical to the final 240 amino acids of the β isoform. DCAF17 is ubiquitously expressed, with highest levels in brain, liver and skin. DCAF17 has been found to colocalize with nucleolar phosphoprotein B23 in human embryonic kidney (HEK293) cells. DCAF17 also interacts with DDB1, CUL-4A and CUL-4B, and may function as a substrate receptor for the CUL-4-DDB1 E3 ubiquitin-protein ligase complex. DCAF17 defects are linked to Woodhouse-Sakati syndrome, a rare autosomal recessive disorder characterized by hypogonadism, alopecia, diabetes mellitus, mental retardation and extrapyramidal syndrome.

REFERENCES

1. Woodhouse, N.J., et al. 1983. A syndrome of hypogonadism, alopecia, diabetes mellitus, mental retardation, deafness, and ECG abnormalities. J. Med. Genet. 20: 216-219.
2. Jin, J., et al. 2006. A family of diverse Cul4-Ddb1-interacting proteins includes Cdt2, which is required for S phase destruction of the replication factor Cdt1. Mol. Cell 23: 709-721.
3. Medica, I., et al. 2007. Woodhouse-Sakati syndrome: case report and symptoms review. Genet. Couns. 18: 227-231.
4. Alazami, A.M., et al. 2008. Mutations in C2orf37, encoding a nucleolar protein, cause hypogonadism, alopecia, diabetes mellitus, mental retardation, and extrapyramidal syndrome. Am. J. Hum. Genet. 83: 684-691.
5. Koshy, G., et al. 2008. Three siblings with Woodhouse-Sakati syndrome in an Indian family. Clin. Dysmorphol. 17: 57-60.
6. Schneider, S.A. and Bhatia, K.P. 2008. Dystonia in the Woodhouse Sakati syndrome: A new family and literature review. Mov. Disord. 23: 592-596.

CHROMOSOMAL LOCATION

Genetic locus: DCAF17 (human) mapping to 2q31.1; Dcaf17 (mouse) mapping to 2 C2.

SOURCE

DCAF17 (K-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of DCAF17 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-167334 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

DCAF17 (K-13) is recommended for detection of DCAF17 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).

DCAF17 (K-13) is also recommended for detection of DCAF17 in additional species, including equine, canine, bovine and porcine.

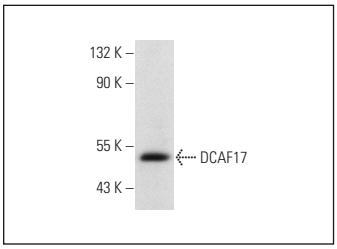
Suitable for use as control antibody for DCAF17 siRNA (h): sc-94658, DCAF17 siRNA (m): sc-141894, DCAF17 shRNA Plasmid (h): sc-94658-SH, DCAF17 shRNA Plasmid (m): sc-141894-SH, DCAF17 shRNA (h) Lentiviral Particles: sc-94658-V and DCAF17 shRNA (m) Lentiviral Particles: sc-141894-V.

Molecular Weight (predicted) of DCAF17 isoforms 1/2: 59/27 kDa.

Molecular Weight (observed) of DCAF17: 48-53 kDa.

Positive Controls: mouse brain extract: sc-2253.

DATA



DCAF17 (K-13): sc-167334. Western blot analysis of DCAF17 expression in mouse brain tissue extract.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.