

# DCAF17 (B-11): sc-393815

## 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 two major isoforms,  $\alpha$  and  $\beta$ , that encode proteins of 240 and 520 amino acids respectively, with the  $\alpha$  isoform identical to the final 240 amino acids of the  $\beta$  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. and Sakati, N.A. 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

DCAF17 (B-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 440-463 near the C-terminus of DCAF17 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

DCAF17 (B-11) is available conjugated to agarose (sc-393815 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393815 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393815 PE), fluorescein (sc-393815 FITC), Alexa Fluor<sup>®</sup> 488 (sc-393815 AF488), Alexa Fluor<sup>®</sup> 546 (sc-393815 AF546), Alexa Fluor<sup>®</sup> 594 (sc-393815 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-393815 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-393815 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-393815 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393815 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## RESEARCH USE

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

## APPLICATIONS

DCAF17 (B-11) is recommended for detection of DCAF17 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 (B-11) 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.

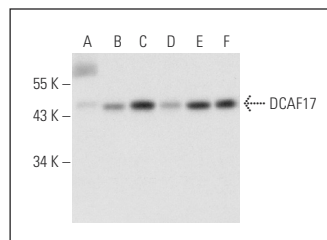
Molecular Weight (observed) of DCAF17: 48-53 kDa.

Positive Controls: mouse brain extract: sc-2253, F9 cell lysate: sc-2245 or H4 cell lysate: sc-2408.

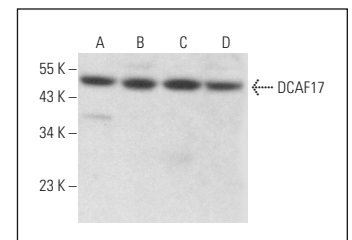
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 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 m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## DATA



DCAF17 (B-11): sc-393815. Western blot analysis of DCAF17 expression in mouse brain tissue extract (A) and IMR-32 (B), SK-N-MC (C), H4 (D), T98G (E) and SH-SY5Y (F) whole cell lysates.



DCAF17 (B-11): sc-393815. Western blot analysis of DCAF17 expression in SH-SY5Y (A), Neuro-2A (B), F9 (C) and C6 (D) whole cell lysates.

## STORAGE

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

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