

Dcun1D1/2 (A-11): sc-398218

BACKGROUND

Dcun1D1, (defective in cullin neddylation protein 1-like protein 1 or DCN1-like protein 1), also designated Rp42, Tes3 or squamous cell carcinoma-related oncogene (SCCRO) is involved in the malignant transformation of squamous cell lineage. Dcun1D1 regulates Gli1, a key regulator of the hedgehog (HH) pathway that plays an important role in development, maintenance, and regeneration of almost all adult tissues. Vascular endothelial growth factor-A (VEGF-A) is co-expressed with Dcun1D1, and the two function to induce angiogenesis. Overexpression of the Dcun1D1 gene is associated with invasive tumor progression and a poor outcome in non-small cell lung cancer, and low-level Dcun1D1 expression in adjacent benign lung tissue predicts an even worse survival rate. Dcun1D1 expression may be a marker of progressive dedifferentiation in squamous cell tumors.

REFERENCES

1. Estilo, C.L., et al. 2003. The role of novel oncogenes squamous cell carcinoma-related oncogene and phosphatidylinositol 3-kinase p110 α in squamous cell carcinoma of the oral tongue. Clin. Cancer Res. 9: 2300-2306.
2. Lum, L. and Beachy, P.A. 2004. The Hedgehog response network: sensors, switches, and routers. Science 304: 1755-1759.
3. Sarkaria, I.S., et al. 2004. SCCRO expression correlates with invasive progression in bronchioloalveolar carcinoma. Ann. Thorac. Surg. 78: 1734-1741.
4. Sarkaria, I.S., et al. 2004. Squamous cell carcinoma-related oncogene is highly expressed in developing, normal, and adenomatous adrenal tissue but not in aggressive adrenocortical carcinomas. Surgery 136: 1122-1128.

CHROMOSOMAL LOCATION

Genetic locus: DCUN1D1 (human) mapping to 3q26.33, DCUN1D2 (human) mapping to 13q34; Dcun1d1 (mouse) mapping to 3 B, Dcun1d2 (mouse) mapping to 8 A1.1.

SOURCE

Dcun1D1/2 (A-11) is a mouse monoclonal antibody raised against amino acids 71-233 mapping within an internal region of Dcun1D1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Dcun1D1/2 (A-11) is available conjugated to agarose (sc-398218 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398218 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398218 PE), fluorescein (sc-398218 FITC), Alexa Fluor[®] 488 (sc-398218 AF488), Alexa Fluor[®] 546 (sc-398218 AF546), Alexa Fluor[®] 594 (sc-398218 AF594) or Alexa Fluor[®] 647 (sc-398218 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-398218 AF680) or Alexa Fluor[®] 790 (sc-398218 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Dcun1D1/2 (A-11) is recommended for detection of Dcun1D1 and Dcun1D2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

Dcun1D1/2 (A-11) is also recommended for detection of Dcun1D1 and Dcun1D2 in additional species, including equine, canine, bovine and porcine.

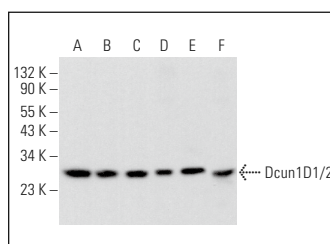
Molecular Weight of Dcun1D1/2: 30 kDa.

Positive Controls: TT whole cell lysate: sc-364195, SCC-4 whole cell lysate: sc-364363 or HeLa whole cell lysate: sc-2200.

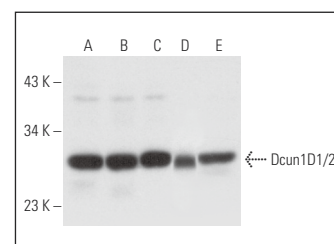
RECOMMENDED SUPPORT REAGENTS

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

DATA



Dcun1D1/2 (A-11): sc-398218. Western blot analysis of Dcun1D1/2 expression in NIH/3T3 (A), 3T3-L1 (B), WEHI-231 (C), c4 (D) and Daudi (E) whole cell lysates and rat spleen tissue extract (F).



Dcun1D1/2 (A-11): sc-398218. Western blot analysis of Dcun1D1/2 expression in TT (A), SCC-4 (B), HeLa (C), HEK293 (D) and U-937 (E) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Scott, D.C., et al. 2017. Blocking an N-terminal acetylation-dependent protein interaction inhibits an E3 ligase. Nat. Chem. Biol. 13: 850-857.

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.