SANTA CRUZ BIOTECHNOLOGY, INC.

DDEFL1 (C-19): sc-162730

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

DDEFL1 (development and differentiation enhancing factor-like 1), also known as ACAP4, UPLC1, CENTB6 or ASAP3 (ARFGAP with SH3 domain, ankyrin repeat and PH domain 3), is a 903 amino acid cytoplasmic protein belonging to the subfamily of ADP-ribosylation factor (ARF) GTPase-activating proteins. DDEFL1 contains two ANK repeats, an ARFGAP domain and a PH domain, and is expressed in lung, liver, blood leukocytes and primary hepatocarcinoma. The ARFGAP domain of DDEFL1 catalyzes the hydrolysis of GTP bound to ARF proteins. DDEFL1 promotes cell differentiation and migration, and has been implicated in the pathogenesis of hepatocellular carcinoma. Existing as two isoforms produced by alternative splicing events, DDEFL1 is encoded by a gene located on human chromosome 1. Human chromosome 1 spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome.

REFERENCES

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3. Okabe, H., Furukawa, Y., Kato, T., Hasegawa, S., Yamaoka, Y. and Nakamura, Y. 2004. Isolation of development and differentiation enhancing factor-like 1 (DDEFL1) as a drug target for hepatocellular carcinomas. Int. J. Oncol. 24: 43-48.
4. Randazzo, P.A. and Hirsch, D.S. 2004. ARFGAPs: multifunctional proteins that regulate membrane traffic and actin remodelling. Cell. Signal. 16: 401-413.
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CHROMOSOMAL LOCATION

Genetic locus: ASAP3 (human) mapping to 1p36.12.

SOURCE

DDEFL1 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of DDEFL1 of human origin.

STORAGE

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

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-162730 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DDEFL1 (C-19) is recommended for detection of DDEFL1 of 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 DDEF1 or DDEF2.

DDEFL1 (C-19) is also recommended for detection of DDEFL1 in additional species, including porcine.

Suitable for use as control antibody for DDEFL1 siRNA (h): sc-88264, DDEFL1 shRNA Plasmid (h): sc-88264-SH and DDEFL1 shRNA (h) Lentiviral Particles: sc-88264-V.

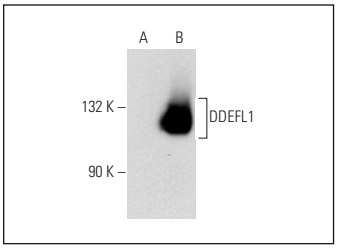
Molecular Weight of DDEFL1: 99 kDa.

Positive Controls: DDEFL1 (m): 293T Lysate: sc-125230.

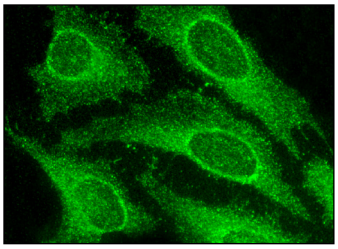
RECOMMENDED SECONDARY REAGENTS

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



DDEFL1 (C-19): sc-162730. Western blot analysis of DDEFL1 expression in non-transfected: sc-117752 (**A**) and mouse DDEFL1 transfected: sc-125230 (**B**) 293T whole cell lysates.



DDEFL1 (C-19): sc-162730. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

RESEARCH USE

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