SANTA CRUZ BIOTECHNOLOGY, INC.

DDEF2 (H-300): sc-15357

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

DDEF2 (ADP ribosylation factor [ARF]-GTPase-activating protein [GAP] containing SH3, ANK repeats, and PH domain, PAP, PAG2, AMAP1, ZG14P, centaurin β4) is a phospholipid-dependent ADP-ribosylation factor (ARF) GTPase-activating protein (ARF-GAP) that binds to protein-tyrosine kinases Src and focal adhesion kinase. ARF family GTP-binding proteins are regulators of membrane traffic and cytoskeletal organization. Modulation of ARF activity by DDEF2 is important for the regulation of focal adhesion assembly and/or organization by influencing the mechanisms responsible for the recruitment and organization of focal adhesion proteins paxillin and FAK. In spreading platelets, most endogenous DDEF2 is localized at peripheral focal adhesions. Pyk2 directly phosphorylates DDEF2 on tyrosine-308 and -782, and this event affects the phosphoinositide binding profile of DDEF2. DDEF2 is phospho-rylated on tyrosine residues in cells expressing activated Src and tyrosine phosphorylation depends on a proline-rich class II Src SH3 binding site.

CHROMOSOMAL LOCATION

Genetic locus: ASAP2 (human) mapping to 2p25.1; Asap2 (mouse) mapping to 12 A1.2.

SOURCE

DDEF2 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of DDEF2 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.

STORAGE

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

APPLICATIONS

DDEF2 (H-300) is recommended for detection of DDEF2 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

DDEF2 (H-300) is also recommended for detection of DDEF2 in additional species, including canine.

Suitable for use as control antibody for DDEF2 siRNA (h): sc-41694, DDEF2 siRNA (m): sc-41695, DDEF2 shRNA Plasmid (h): sc-41694-SH, DDEF2 shRNA Plasmid (m): sc-41695-SH, DDEF2 shRNA (h) Lentiviral Particles: sc-41694-V and DDEF2 shRNA (m) Lentiviral Particles: sc-41695-V.

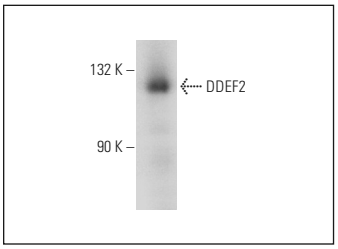
Molecular Weight of DDEF2: 130 kDa.

Positive Controls: rat brain extract: sc-2392 or KNRK whole cell lysate: sc-2214.

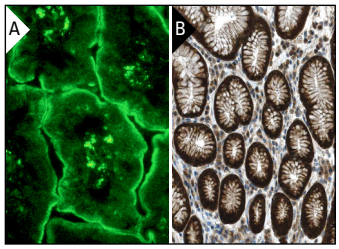
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



DDEF2 (H-300): sc-15357. Western blot analysis of DDEF2 expression in rat brain tissue extract.



DDEF2 (H-300): sc-15357. Immunofluorescence staining of normal mouse intestine frozen section showing membrane staining (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human stomach tissue showing cytoplasmic staining of glandular cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program (**B**).

SELECT PRODUCT CITATIONS

1. Cheerathodi, M. and Ballif, B.A. 2011. Identification of CrkL-SH3 binding proteins from embryonic murine brain: implications for Reelin signaling during brain development. J. Proteome Res. 10: 4453-4462.

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.