Edc3 (E-20): sc-55080



The Power to Question

BACKGROUND

The major eukaryotic mRNA decay pathway occurs through deadenylation, decapping, and 5' to 3' degradation of the mRNA. Decapping is a critical control point in this decay pathway. During the process of mRNA degradation, Edc3 has been found to play a role in mRNA decapping. As part of the mRNA degradation process, Edc3 becomes part of a complex that also contains hDcp1a, hDcp2a, RCK and Edc4/HEDLS. Within this complex, Edc3 directly interacts with Dcp1a and DDX6. Edc3, enhancer of mRNA-decapping protein 3, is a 508 amino acid protein that maps to human gene EDC3. Edc3 is a member of the Edc3 family and contains one YjeF N-terminal domain. Edc3 is localized to the cytoplasm and is found primarily in the cells' processing bodies (PB). Evidence indicates Edc3 also interacts with TTP, zinc finger protein 36, a candidate gene for obesity-related metabolic complications.

CHROMOSOMAL LOCATION

Genetic locus: EDC3 (human) mapping to 15q24.1; Edc3 (mouse) mapping to 9 B.

SOURCE

Edc3 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Edc3 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-55080 P, (100 μ g 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

Edc3 (E-20) is recommended for detection of Edc3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

Edc3 (E-20) is also recommended for detection of Edc3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Edc3 siRNA (h): sc-62134, Edc3 siRNA (m): sc-62135, Edc3 shRNA Plasmid (h): sc-62134-SH, Edc3 shRNA Plasmid (m): sc-62135-SH, Edc3 shRNA (h) Lentiviral Particles: sc-62134-V and Edc3 shRNA (m) Lentiviral Particles: sc-62135-V.

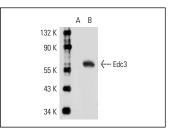
Molecular Weight of Edc3: 56 kDa.

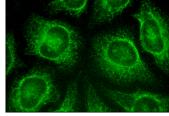
Positive Controls: HeLa nuclear extract: sc-2120, Edc3 (h): 293 Lysate: sc-111192 or PC-3 cell lysate: sc-2220.

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





Edc3 (E-20): sc-55080. Western blot analysis of Edc3 expression in non-transfected: sc-110760 (**A**) and human Edc3 transfected: sc-111192 (**B**) 293 whole scall heater.

Edc3 (E-20): sc-55080. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

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.



Try Edc3 (D-6): sc-365024 or Edc3 (F-9): sc-271806, our highly recommended monoclonal alternatives to Edc3 (E-20).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com