

HECTD3 (C-19): sc-243012

BACKGROUND

HECT (homologous to the E6-AP carboxyl terminus) proteins are a large group of E3 ubiquitin-ligases that play a role in the specificity and selectivity of ubiquitylation. The human genome encodes at least 20 different HECT domain proteins, which are grouped into 2 classes based on their E2 specificity. HECT enzymes also regulate the trafficking of many receptors, transporters, viral proteins and channels. Since HECT proteins are involved in the degradation of vital tumor suppressor molecules, it is theorized that some may contribute to tumorigenesis. HECTD3 (HECT domain-containing protein 3) is a 861 amino acid E3 ubiquitin-ligase that characteristically accepts ubiquitin from an E2 ubiquitin-conjugating enzyme and directly transfers the ubiquitin to targeted substrates. HECTD3 directly binds Tara, a protein that plays a role in organization of the actin cytoskeleton and cell cycle regulation. Overexpression of HECTD3 enhances ubiquitination of Tara, suggesting that HECTD3 may facilitate cell cycle progression by regulating Tara degradation. There are two isoforms of HECTD3 that are produced as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HECTD3 (human) mapping to 1p34.1; Hectd3 (mouse) mapping to 4 D1.

SOURCE

HECTD3 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of HECTD3 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 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-243012 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HECTD3 (C-19) is recommended for detection of HECTD3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

HECTD3 (C-19) is also recommended for detection of HECTD3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for HECTD3 siRNA (h): sc-78623, HECTD3 siRNA (m): sc-145930, HECTD3 shRNA Plasmid (h): sc-78623-SH, HECTD3 shRNA Plasmid (m): sc-145930-SH, HECTD3 shRNA (h) Lentiviral Particles: sc-78623-V and HECTD3 shRNA (m) Lentiviral Particles: sc-145930-V.

Molecular Weight of HECTD3 isoform 1/2: 97/54 kDa.

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) 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.

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.