

HECTD2 (G-13): sc-164574

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 two 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. HECTD2 (HECT domain-containing protein 2) is a 776 amino acid E3 ubiquitin-ligase that characteristically accepts ubiquitin from an E2 ubiquitin-conjugating enzyme and directly transfers the ubiquitin to targeted substrates. Recently, HECTD2 haplotypes have been linked to the susceptibility of acquiring human prion diseases such as Creutzfeldt-Jakob Disease and kuru, which present after a long, clinically silent incubation period that seems to be determined by factors such as genetic background.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HECTD2 (human) mapping to 10q23.32; Hectd2 (mouse) mapping to 19 C2.

SOURCE

HECTD2 (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HECTD2 of human origin.

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-164574 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HECTD2 (G-13) is recommended for detection of HECTD2 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); non cross-reactive with HECTD1 or HECTD3.

HECTD2 (G-13) is also recommended for detection of HECTD2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for HECTD2 siRNA (h): sc-90369, HECTD2 siRNA (m): sc-145929, HECTD2 shRNA Plasmid (h): sc-90369-SH, HECTD2 shRNA Plasmid (m): sc-145929-SH, HECTD2 shRNA (h) Lentiviral Particles: sc-90369-V and HECTD2 shRNA (m) Lentiviral Particles: sc-145929-V.

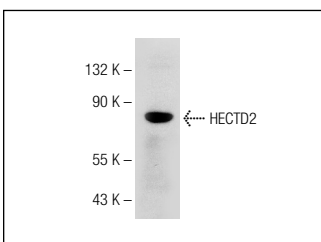
Molecular Weight of HECTD2: 88 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

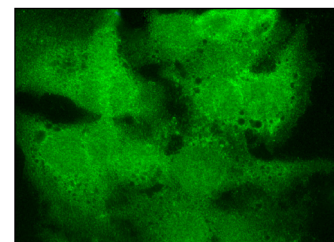
RECOMMENDED SECONDARY REAGENTS

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



HECTD2 (G-13): sc-164574. Western blot analysis of HECTD2 expression in Hep G2 whole cell lysate.



HECTD2 (G-13): sc-164574. Immunofluorescence staining of formalin-fixed Hep G2 cells showing cytoplasmic and nuclear localization.

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.