SANTA CRUZ BIOTECHNOLOGY, INC.

Herc3 (37.2): sc-100720

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The Power to Question

BACKGROUND

Herc3 (HECT domain and RCC1-like domain-containing protein 3) is a 1,050 amino acid protein that localizes to both the cytoplasm and to vesicular-like structures. Involved in protein degradation pathways, Herc3 functions as an E3 ubiquitin ligase that accepts a ubiquitin residue from an E2 ubiquitin-conjugating enzyme and immediately transfers that residue to a protein that is targeted for degradation. Herc3, like other members of the Herc family, contains one HECT (E6AP-type E3 ubiquitin-protein ligase) domain and seven RCC1 repeats through which is conveys its E3 ubiquitin ligase activity. Upon ubiquitination, Herc3 is targeted for proteasomal degradation.

REFERENCES

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3. Cruz, C., Nadal, M., Ventura, F., Bartrons, R., Estivill, X. and Rosa, J.L. 1999. The human Herc3 gene maps to chromosome 4q21 by fluorescence *in situ* hybridization. Cytogenet. Cell Genet. 87: 263-264.
4. Online Mendelian Inheritance in Man, OMIM™. 2000. Johns Hopkins University, Baltimore, MD. MIM Number: 605200. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Cruz, C., Ventura, F., Bartrons, R. and Rosa, J.L. 2001. Herc3 binding to and regulation by ubiquitin. FEBS Lett. 488: 74-80.
6. Hochrainer, K., Mayer, H., Baranyi, U., Binder, B., Lipp, J. and Kroismayr, R. 2005. The human Herc family of ubiquitin ligases: novel members, genomic organization, expression profiling, and evolutionary aspects. Genomics 85: 153-164.

CHROMOSOMAL LOCATION

Genetic locus: HERC3 (human) mapping to 4q22.1.

SOURCE

Herc3 (37.2) is a mouse monoclonal antibody raised against recombinant Herc3 of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 kappa light chain 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

Herc3 (37.2) is recommended for detection of Herc3 of human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Herc3 siRNA (h): sc-89133, Herc3 shRNA Plasmid (h): sc-89133-SH and Herc3 shRNA (h) Lentiviral Particles: sc-89133-V.

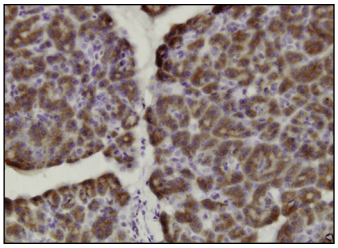
Molecular Weight of Herc3: 117 kDa.

Positive Controls: human pancreas extract: sc-363770.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 2) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Herc3 (37.2): sc-100720. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human pancreas tissue showing cytoplasmic localization.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.