SANTA CRUZ BIOTECHNOLOGY, INC.

HEXDC (N-16): sc-243013

BACKGROUND

HEXDC (hexosaminidase (glycosyl hydrolase family 20, catalytic domain) containing), also known as hexosaminidase D, β-hexosaminidase D, N-acetyl-β-galactosaminidase, hexosaminidase domain-containing protein or β-N-acetylhexosaminidase, is a 486 amino acid cytoplasmic and nuclear protein that has hexosaminidase activity and belongs to the glycosyl hydrolase 20 family. Existing as two alternatively spliced isoforms, HEXDC catalyzes the hydrolysis of non-reducing N-acetyl-D-hexosamine residues near the termini of N-acetyl-β-D-hexosaminides. The gene encoding HEXDC maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Defects in p53 is associated with malignant cell growth and Li-Fraumeni syndrome. BRCA1 is directly involved in DNA repair and is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of the ovary, colon, prostate gland and fallopian tubes.

REFERENCES

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3. Julien, S., et al. 2001. Expression of sialyl-Tn antigen in breast cancer cells transfected with the human CMP-Neu5Ac: GalNAc α2,6-sialyltransferase (ST6GalNac I) cDNA. Glycoconj. J. 18: 883-893.
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5. Sewell, R., et al. 2006. The ST6GalNAc-I sialyltransferase localizes throughout the Golgi and is responsible for the synthesis of the tumor-associated sialyl-Tn O-glycan in human breast cancer. J. Biol. Chem. 281: 3586-3594.
6. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 610138. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
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CHROMOSOMAL LOCATION

Genetic locus: HEXDC (human) mapping to 17q25.3; Hexdc (mouse) mapping to 11 E2.

RESEARCH USE

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

SOURCE

HEXDC (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of HEXDC 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.

Blocking peptide available for competition studies, sc-243013 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HEXDC (N-16) is recommended for detection of HEXDC 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).

HEXDC (N-16) is also recommended for detection of HEXDC in additional species, including equine and bovine.

Suitable for use as control antibody for HEXDC siRNA (h): sc-94064, HEXDC siRNA (m): sc-145949, HEXDC shRNA Plasmid (h): sc-94064-SH, HEXDC shRNA Plasmid (m): sc-145949-SH, HEXDC shRNA (h) Lentiviral Particles: sc-94064-V and HEXDC shRNA (m) Lentiviral Particles: sc-145949-V.

Molecular Weight of HEXDC: 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.

STORAGE

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

PROTOCOLS

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