HEXDC (L-19): sc-243015



The Power to Overtin

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-acetyl-hexosaminidase, 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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- 2. Lee, Y.C., et al. 1999. Molecular cloning and functional expression of two members of mouse NeuAc α 2,3Gal β 1, 3GalNAc GalNAc α 2,6-sialyltransferase family, ST6GalNAc III and IV. J. Biol. Chem. 274: 11958-11967.
- 3. Julien, S., et al. 2001. Expression of sialyl-Tn antigen in breast cancer cells transfected with the human CMP-Neu5Ac: GalNAc α 2,6-sialyltransferase (ST6GalNac I) cDNA. Glycoconj. J. 18: 883-893.
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- 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 17g25.3.

SOURCE

HEXDC (L-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HEXDC 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 μg IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-243015 P, ($100 \mu g$ peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HEXDC (L-19) is recommended for detection of HEXDC of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg 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).

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

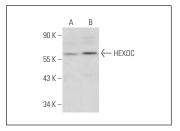
Molecular Weight of HEXDC: 54 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or Jurkat whole cell lysate: sc-2204.

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



HEXDC (L-19): sc-243015. Western blot analysis of HEXDC expression in Hep G2 (A) and Jurkat (B) whole cell lysates.

RESEARCH USE

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