SANTA CRUZ BIOTECHNOLOGY, INC.

HDGFRP3 (h): 293 Lysate: sc-113208

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

HDGFRP3 (hepatoma-derived growth factor-related protein 3), also known as HRP-3 or HDGF-2, is a 203 amino acid nuclear protein belonging to the HDGF family and containing one PWWP domain. HDGF was initially characterized as a secreted mitogen from the Huh-7 human hepatoma cell line. HDGF is also reported to be involved in organ development and lung remodeling after injury by promoting proliferation of lung epithelial cells. HDGFRP3 is thought to be a radioresistance-related gene, regulating the radio- and chemo-resistant phenotype by reactive oxygen species-dependent p53 activation. HDGFRP3 is also thought to promote neurite outgrowth in cortical neurons via microtubule interaction, and may play a role in cell proliferation and enhance DNA synthesis. The HDGFRP3 gene is located on human chromosome 15 and conserved in mouse, rat, chimpanzee, bovine, canine and more.

REFERENCES

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2. Cherepanov, P., et al. 2004. Identification of an evolutionarily conserved domain in human lens epithelium-derived growth factor/transcriptional co-activator p75 (LEDGF/p75) that binds HIV-1 integrase. J. Biol. Chem. 279: 48883-48892.
3. El-Tahir, H.M., et al. 2009. Hepatoma-derived growth factor-related protein-3 interacts with microtubules and promotes neurite outgrowth in mouse cortical neurons. J. Biol. Chem. 284: 11637-11651.
4. Bisson, N., et al. 2011. Selected reaction monitoring mass spectrometry reveals the dynamics of signaling through the GRB2 adaptor. Nat. Biotechnol. 29: 653-658.
5. Yun, H.S., et al. 2013. Depletion of hepatoma-derived growth factor-related protein-3 induces apoptotic sensitization of radioresistant A549 cells via reactive oxygen species-dependent p53 activation. Biochem. Biophys. Res. Commun. 439: 333-339.
6. Zhu, J., et al. 2013. Protein interaction discovery using parallel analysis of translated ORFs (PLATO). Nat. Biotechnol. 31: 331-334.

CHROMOSOMAL LOCATION

Genetic locus: HDGFRP3 (human) mapping to 15q25.2.

PRODUCT

HDGFRP3 (h): 293 Lysate represents a lysate of human HDGFRP3 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

HDGFRP3 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive HDGFRP3 antibodies. Recommended use: 10-20 µl per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

RESEARCH USE

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