SANTA CRUZ BIOTECHNOLOGY, INC.

HYPE (G-24): sc-101979

BACKGROUND

Huntingtin yeast partner E (HYPE), also known as FIC domain-containing protein (FICD) and Huntingtin-interacting protein 13, is a 458 amino acid single-pass membrane protein. HYPE is thought to interact with Huntingtin, a protein which induces neurodegeneration when mutated. HYPE also contains two tetratricopeptide repeats (TPR), which may be involved in protein-protein interaction. The gene that encodes HYPE is located on chromosome 12, which encodes over 1,100 genes within 132 million bases and makes up about 4.5% of the human genome. A number of skeletal deformities are linked to chromosome 12, including hypochondrogenesis, achondrogenesis and Kniest dysplasia. Chromosome 12 is also home to a homeobox gene cluster that encodes crucial transcription factors for morphogenesis, and the natural killer complex gene cluster encoding C-type lectin proteins, which mediate the NK cell response to MHC class I interaction. Trisomy 12p leads to facial development defects, seizure disorders and a host of other symptoms that vary in severity, depending on the extent of mosaicism, and is most severe in cases of complete trisomy.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FICD (human) mapping to 12q23.3; Ficd (mouse) mapping to 5 F.

SOURCE

HYPE (G-24) is a purified rabbit polyclonal antibody raised against HYPE of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

RESEARCH USE

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

APPLICATIONS

HYPE (G-24) is recommended for detection of HYPE of mouse, rat, human and canine 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for HYPE siRNA (h): sc-95752, HYPE siRNA (m): sc-146121, HYPE shRNA Plasmid (h): sc-95752-SH, HYPE shRNA Plasmid (m): sc-146121-SH, HYPE shRNA (h) Lentiviral Particles: sc-95752-V and HYPE shRNA (m) Lentiviral Particles: sc-146121-V.

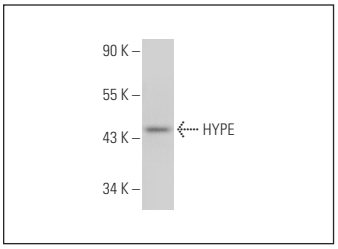
Molecular Weight of HYPE: 52 kDa.

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 goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



HYPE (G-24): sc-101979. Western blot analysis of HYPE expression in Hep G2 whole cell lysate.

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 or our catalog for detailed protocols and support products.