

HYPE (T-12): sc-132716

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

- Allen, T.L., Brothman, A.R., Carey, J.C. and Chance, P.F. 1996. Cytogenetic and molecular analysis in trisomy 12p. *Am. J. Med. Genet.* 63: 250-256.
- Faber, P.W., Barnes, G.T., Srinidhi, J., Chen, J., Gusella, J.F. and MacDonald, M.E. 1998. Huntingtin interacts with a family of WW domain proteins. *Hum. Mol. Genet.* 7: 1463-1474.
- Trowsdale, J., Barten, R., Haude, A., Stewart, C.A., Beck, S. and Wilson, M.J. 2001. The genomic context of natural killer receptor extended gene families. *Immunol. Rev.* 181: 20-38.
- Nishimura, G., Haga, N., Kitoh, H., Tanaka, Y., Sonoda, T., Kitamura, M., Shirahama, S., Itoh, T., Nakashima, E., Ohashi, H. and Ikegawa, S. 2005. The phenotypic spectrum of COL2A1 mutations. *Hum. Mutat.* 26: 36-43.

CHROMOSOMAL LOCATION

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

SOURCE

HYPE (T-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HYPE 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-132716 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

HYPE (T-12) is recommended for detection of HYPE of mouse, rat and 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 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.

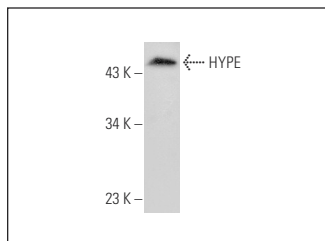
Molecular Weight of HYPE: 52 kDa.

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 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



HYPE (T-12): sc-132716. Western blot analysis of HYPE expression in Hep G2 whole cell lysate.

RESEARCH USE

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



Try **HYPE (G-7): sc-515368** or **HYPE (3F5): sc-517074**, our highly recommended monoclonal alternatives to HYPE (T-12).