

HS1BP3 (m2): 293T Lysate: sc-178765

BACKGROUND

HS1BP3 (HCLS1-binding protein 3), also known as ETM2 or HS1-BP3, is a 392 amino acid protein that contains one PX (phox homology) domain, a leucine zipper, immunoreceptor tyrosine-based inhibitory motif-like motifs and multiple proline-rich regions. Expressed primarily in brain, HS1BP3 is encoded by a gene mapping to human chromosome 2p24.1. The gene encoding HS1BP3 is frequently mutated in familial essential tremor, a disorder characterized by kinetic tremor of the hands, voice or head, though there is no correlation to Parkinson disease. HS1BP3 interacts with HAX-1's SH3 domain, and may also play a role in the regulation of catecholamine and serotonin metabolism. Acting as a regulator of IL-2 signaling, HS1BP3 is likely involved in lymphocyte activation.

REFERENCES

1. Takemoto, Y., Furuta, M., Sato, M., Kubo, M. and Hashimoto, Y. 1999. Isolation and characterization of a novel HS1 SH3 domain binding protein, HS1BP3. *Int. Immunol.* 11: 1957-1964.
2. Higgins, J.J., Lombardi, R.Q., Pucilowska, J., Jankovic, J., Tan, E.K. and Rooney, J.P. 2005. A variant in the HS1-BP3 gene is associated with familial essential tremor. *Neurology* 64: 417-421.
3. Deng, H., Le, W.D., Guo, Y., Huang, M.S., Xie, W.J. and Jankovic, J. 2005. Extended study of A265G variant of HS1BP3 in essential tremor and Parkinson disease. *Neurology* 65: 651-652.
4. Shatunov, A., Jankovic, J., Elble, R., Sambuughin, N., Singleton, A., Hallett, M. and Goldfarb, L. 2005. A variant in the HS1-BP3 gene is associated with familial essential tremor. *Neurology* 65: 1995.
5. Higgins, J.J., Lombardi, R.Q., Pucilowska, J., Jankovic, J., Golbe, L.I. and Verhagen, L. 2006. HS1-BP3 gene variant is common in familial essential tremor. *Mov. Disord.* 21: 306-309.
6. Ma, S., Davis, T.L., Blair, M.A., Fang, J.Y., Bradford, Y., Haines, J.L. and Hedera, P. 2006. Familial essential tremor with apparent autosomal dominant inheritance: should we also consider other inheritance modes? *Mov. Disord.* 21: 1368-1374.
7. Deng, H., Le, W.D., Hunter, C.B., Mejia, N., Xie, W.J. and Jankovic, J. 2007. A family with Parkinson disease, essential tremor, bell palsy, and parkin mutations. *Arch. Neurol.* 64: 421-424.
8. Keeling, B.H., Vilarino-Güell, C., Ross, O.A., Wszolek, Z.K., Uitti, R.J. and Farrer, M.J. 2009. DRD3 Ser9Gly and HS1BP3 Ala265Gly are not associated with Parkinson disease. *Neurosci. Lett.* 461: 74-75.
9. Shi, T., Xie, J., Xiong, Y., Deng, W., Guo, J., Wang, F. and Ma, D. 2011. Human HS1BP3 induces cell apoptosis and activates AP-1. *BMB Rep.* 44: 381-386.

CHROMOSOMAL LOCATION

Genetic locus: Hs1bp3 (mouse) mapping to 12 A1.1.

PRODUCT

HS1BP3 (m2): 293T Lysate represents a lysate of mouse HS1BP3 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

HS1BP3 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive HS1BP3 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

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.

RESEARCH USE

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

PROTOCOLS

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