Dysbindin (m): 293T Lysate: sc-119875



The Power to Question

BACKGROUND

Hermansky-Pudlak syndrome (HPS) is a rare, genetically heterogeneous, autosomal recessive disorder. It is characterized by oculocutaneous albinism, lysosomal storage defects and prolonged bleeding due to platelet storage pool deficiency. HPS is a result of defects in various cytoplasmic organelles such as melanosomes, platelet dense granules and lysosomes. The HPS proteins, including HPS-1-6 and Dysbindin (also designated HPS-7), all interact within three distinct, ubiquitously expressed protein complexes or biogenesis of lysosome-related organelle complexes. Defects in the genes encoding for these proteins are the cause of HPS. Dysbindin binds to dystrobrevins in the dystrophin-associated protein complex (DPC) complex. Dysbindin is a cytoplasmic protein. Isoforms 1 and 2 are the result of alternative splicing.

REFERENCES

- Numakawa, T., Yagasaki, Y., Ishimoto, T., Okada, T., Suzuki, T., Iwata, N., Ozaki, N., Taguchi, T., Tatsumi, M., Kamijima, K., Straub, R.E., Weinberger, D.R., Kunugi, H. and Hashimoto, R. 2004. Evidence of novel neuronal functions of Dysbindin, a susceptibility gene for schizophrenia. Hum. Mol. Genet. 13: 2699-2708.
- 2. Benson, M.A., Sillitoe, R.V. and Blake, D.J. 2004. Schizophrenia genetics: Dysbindin under the microscope. Trends Neurosci. 27: 516-519.
- Schosser, A. and Aschauer, H.N. 2004. In search of susceptibility genes for schizophrenia. Wien. Klin. Wochenschr. 116: 827-833.
- Zill, P., Baghai, T.C., Engel, R., Zwanzger, P., Schule, C., Eser, D., Behrens, S., Rupprecht, R., Moller, H.J., Ackenheil, M. and Bondy, B. 2004. The Dysbindin gene in major depression: an association study. Am. J. Med. Genet. B Neuropsychiatr. Genet. 129B: 55-58.
- Kendler, K.S. 2004. Schizophrenia genetics and Dysbindin: a corner turned?
 Am. J. Psychiatry 161: 1533-1536.
- Bray, N.J., Preece, A., Williams, N.M., Moskvina, V., Buckland, P.R., Owen, M.J. and O'Donovan, M.C. 2005. Haplotypes at the dystrobrevin binding protein 1 (DTNBP1) gene locus mediate risk for schizophrenia through reduced DTNBP1 expression. Hum. Mol. Genet. 14: 1947-1954.
- Raybould, R., Green, E.K., MacGregor, S., Gordon-Smith, K., Heron, J., Hyde, S., Caesar, S., Nikolov, I., Williams, N., Jones, L., O'Donovan, M.C., Owen, M.J., Jones, I., Kirov, G. and Craddock, N. 2005. Bipolar disorder and polymorphisms in the Dysbindin gene (DTNBP1). Biol. Psychiatry 57: 696-701.
- 8. Arnold, S.E., Talbot, K. and Hahn, C.G. 2005. Neurodevelopment, neuroplasticity and new genes for schizophrenia. Prog. Brain Res. 147: 319-345.

CHROMOSOMAL LOCATION

Genetic locus: Dtnbp1 (mouse) mapping to 13 A5.

PRODUCT

Dysbindin (m): 293T Lysate represents a lysate of mouse Dysbindin transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

Dysbindin (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Dysbindin antibodies. Recommended use: 10-20 μ l per lane.

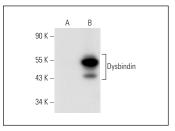
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

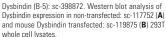
Dysbindin (B-5): sc-398872 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Dysbindin expression in Dysbindin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

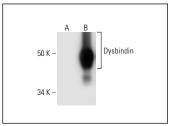
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG λ BP-HRP: sc-516132 or m-lgG λ BP-HRP (Cruz Marker): sc-516132-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz $^{\circ}$ Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA







Dysbindin (D-8): sc-390626. Western blot analysis of Dysbindin expression in non-transfected: sc-117752 (A) and mouse transfected: sc-119875 (B) 293T whole cell lysates.

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.