# yrdC (h2): 293T Lysate: sc-111424



The Power to Question

## **BACKGROUND**

YrdC (yrdC domain-containing protein), also known as IRIP (ischemia/reperfusion-inducible protein homolog), SUA5 or DRIP3 (dopamine receptor-interacting protein 3), is a 279 amino acid ubiquitously expressed protein found at highest levels in brain, liver and pancreas. A member of the SUA5 family, yrdC is involved in certain aspects of transporter activity, such as the regulation of efflux transporter activity and cargo assembly. YrdC is a peripheral membrane protein that contains one yrdC-like domain, interacts with RSC1A1 and localizes to mitochondrial and plasma membranes. The gene encoding yrdC maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome.

#### **REFERENCES**

- 1. Lai, E., et al. 1989. Physical maps of the mouse and human immunoglobulinlike loci. Adv. Immunol. 46: 1-59.
- Lau, E.K., et al. 1999. Two novel polymorphic sequences in the glucocerebrosidase gene region enhance mutational screening and founder effect studies of patients with Gaucher disease. Hum. Genet. 104: 293-300.
- 3. Chen, J., et al. 2003. Isolation and identification of a novel cDNA that encodes human yrdC protein. J. Hum. Genet. 48: 164-169.
- 4. Plasilova, M., et al. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. Eur. J. Hum. Genet. 12: 365-371.
- Jiang, W., et al. 2005. IRIP, a new ischemia/reperfusion-inducible protein that participates in the regulation of transporter activity. Mol. Cell. Biol. 25: 6496-6508.
- Jeronimo, C., et al. 2007. Systematic analysis of the protein interaction network for the human transcription machinery reveals the identity of the 7SK capping enzyme. Mol. Cell 27: 262-274.
- 7. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 612276. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 8. Holliday, E.G., et al. 2009. Strong evidence for a novel schizophrenia risk locus on chromosome 1p31.1 in homogeneous pedigrees from Tamil Nadu, India. Am. J. Psychiatry 166: 206-215.
- Prokopenko, O. and Mirochnitchenko, O. 2009. Ischemia-reperfusioninducible protein modulates cell sensitivity to anticancer drugs by regulating activity of efflux transporter. Am. J. Physiol., Cell Physiol. 296: C1086-C1097.

# **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.

## **CHROMOSOMAL LOCATION**

Genetic locus: YRDC (human) mapping to 1p34.3.

#### **PRODUCT**

yrdC (h2): 293T Lysate represents a lysate of human yrdC transfected 293T cells and is provided as 100 μg protein in 200 μl SDS-PAGE buffer.

# **APPLICATIONS**

yrdC (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive yrdC antibodies. Recommended use: 10-20 μl per lane.

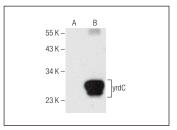
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

yrdC (B-4): sc-376670 is recommended as a positive control antibody for Western Blot analysis of enhanced human yrdC expression in yrdC 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 $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

# DATA



yrdC (B-4): sc-376670. Western blot analysis of yrdC expression in non-transfected: sc-117752 (A) and human yrdC transfected: sc-111424 (B) 293T whole reall lysates

# **RESEARCH USE**

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