SANTA CRUZ BIOTECHNOLOGY, INC.

yrdC (C-15): sc-162422

SANTA CRUZ BIOTECHNOLOGY

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 immunoglobulin-like loci. Adv. Immunol. 46: 1-59.
2. 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, 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.
5. 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.
6. 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.

CHROMOSOMAL LOCATION

Genetic locus: YRDC (human) mapping to 1p34.3; Yrdc (mouse) mapping to 4 D2.2.

SOURCE

yrdC (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of yrdC 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-162422 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

yrdC (C-15) is recommended for detection of yrdC 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).

yrdC (C-15) is also recommended for detection of yrdC in additional species, including canine, bovine and avian.

Suitable for use as control antibody for yrdC siRNA (h): sc-88267, yrdC siRNA (m): sc-155419, yrdC shRNA Plasmid (h): sc-88267-SH, yrdC shRNA Plasmid (m): sc-155419-SH, yrdC shRNA (h) Lentiviral Particles: sc-88267-V and yrdC shRNA (m) Lentiviral Particles: sc-155419-V.

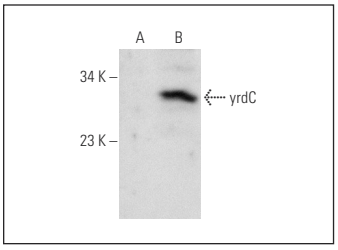
Molecular Weight of yrdC: 30 kDa.

Positive Controls: yrdC (m): 293T Lysate: sc-126266 or yrdC (h2): 293T Lysate: sc-111424.

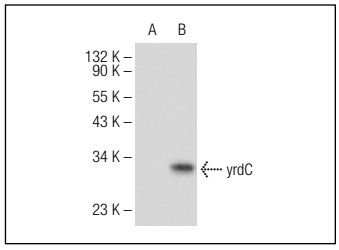
RECOMMENDED SECONDARY REAGENTS

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



yrdC (C-15): sc-162422. Western blot analysis of yrdC expression in non-transfected: sc-117752 (**A**) and human yrdC transfected: sc-111424 (**B**) 293T whole cell lysates.



yrdC (C-15): sc-162422. Western blot analysis of yrdC expression in non-transfected: sc-117752 (**A**) and mouse yrdC transfected: sc-126266 (**B**) 293T whole cell lysates.

STORAGE

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

PROTOCOLS

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