SANTA CRUZ BIOTECHNOLOGY, INC.

WRB (E-20): sc-83350

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

WRB, also known as congenital heart disease 5 protein (CHD5), is a 174 amino acid nuclear protein that has a potential nuclear localization signal and a tryptophan-rich C-terminus. Widely expressed in both adult and fetal tissues, WRB is encoded by a gene that localizes to a region on chromosome 21 that is associated with congenital heart disease (CHD) in Down's syndrome (DS) patients. DS, a chromosomal disorder caused by an extra copy of chromosome 21, is characterized by poor muscle tone, impaired cognitive ability, retarded physical growth and an increased risk for CHD. Due to its location on chromosome 21, WRB may be involved in the pathogenesis of DS-related heart disease.

REFERENCES

1. Korenberg, J.R., et al. 1992. Down syndrome: molecular mapping of the congenital heart disease and duodenal stenosis. Am. J. Hum. Genet. 50: 294-302.
2. Delabar, J.M., et al. 1993. Molecular mapping of twenty-four features of Down syndrome on chromosome 21. Eur. J. Hum. Genet. 1: 114-124.

CHROMOSOMAL LOCATION

Genetic locus: WRB (human) mapping to 21q22.2; Wrb (mouse) mapping to 16 C4.

SOURCE

WRB (E-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of WRB of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83350 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

WRB (E-20) is recommended for detection of WRB 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).

WRB (E-20) is also recommended for detection of WRB in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for WRB siRNA (h): sc-91393, WRB siRNA (m): sc-155359, WRB shRNA Plasmid (h): sc-91393-SH, WRB shRNA Plasmid (m): sc-155359-SH, WRB shRNA (h) Lentiviral Particles: sc-91393-V and WRB shRNA (m) Lentiviral Particles: sc-155359-V.

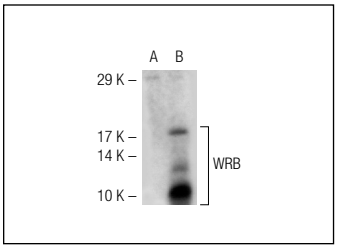
Molecular Weight of WRB: 20 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409 or HSP 27 (h): 293 Lysate: sc-113042.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



WRB (E-20): sc-83350. Western blot analysis of WRB expression in non-transfected: sc-117752 (**A**) and human WRB transfected: sc-113064 (**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.

RESEARCH USE

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

PROTOCOLS

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