SANTA CRUZ BIOTECHNOLOGY, INC.

LRWD1 (S-12): sc-136741



BACKGROUND

LRWD1 (leucine-rich repeats and WD repeat domain containing 1) is a 647 amino acid protein that contains 5 WD domains and 3 LRR (leucine-rich) repeats. LRWD1 undergoes post-translational phosphorylation, most likely by ATR or ATM, and is encoded by a gene that maps to human chromosome 7. Human chromosome 7 is about 158 million bases long, encodes over 1,000 genes and makes up about 5% of the human genome. Chromosome 7 has been linked to Osteogenesis imperfecta, Pendred syndrome, Lissencephaly, Citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance.

REFERENCES

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- Liang, H., Fairman, J., Claxton, D.F., Nowell, P.C., Green, E.D. and Nagarajan, L. 1998. Molecular anatomy of chromosome 7q deletions in myeloid neoplasms: evidence for multiple critical loci. Proc. Natl. Acad. Sci. USA 95: 3781-3785.
- Iwasaki, S., Usami, S., Abe, S., Isoda, H., Watanabe, T. and Hoshino, T. 2001. Long-term audiological feature in Pendred syndrome caused by PDS mutation. Arch. Otolaryngol. Head Neck Surg. 127: 705-708.
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- Osborne, L.R., Joseph-George, A.M. and Scherer, S.W. 2006. Williams-Beuren syndrome diagnosis using fluorescence *in situ* hybridization. Methods Mol. Med. 126: 113-128.

CHROMOSOMAL LOCATION

Genetic locus: LRWD1 (human) mapping to 7q22.1; Lrwd1 (mouse) mapping to 5 G2.

SOURCE

LRWD1 (S-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of LRWD1 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-136741 P, (100 μ g 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

LRWD1 (S-12) is recommended for detection of LRWD1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for LRWD1 siRNA (h): sc-89721, LRWD1 siRNA (m): sc-149127, LRWD1 shRNA Plasmid (h): sc-89721-SH, LRWD1 shRNA Plasmid (m): sc-149127-SH, LRWD1 shRNA (h) Lentiviral Particles: sc-89721-V and LRWD1 shRNA (m) Lentiviral Particles: sc-149127-V.

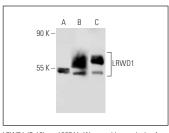
Molecular Weight of LRWD1: 71 kDa.

Positive Controls: mouse thymus extract: sc-2406, WI 38 whole cell lysate: sc-364260 or LADMAC whole cell lysate: sc-364189.

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



LRWD1 (S-12): sc-136741. Western blot analysis of LRWD1 expression in LADMAC (**A**) and WI 38 (**B**) whole cell lysates and mouse thymus tissue extract (**C**)

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.