SANTA CRUZ BIOTECHNOLOGY, INC.

WBP5 (C-14): sc-244602



BACKGROUND

WW domain-binding protein 5 (WBP5), also known as TCEAL9, is a 104 amino acid protein and is a member of the TFS-II family and the TFA subfamily. The WW domain is composed of 38 to 40 semi-conserved amino acids and is shared by various groups of proteins, including structural, regulatory and signaling proteins. The domain mediates protein-protein interactions through the binding of polyproline ligands. The gene encoding WBP5 is located on human chromosome X, which comprises of about 153 million base pairs and nearly 1,000 genes. Color blindness, hemophilia and Duchenne muscular dystrophy are well known X chromosome-linked conditions which affect males more frequently, as males carry a single X chromosome.

REFERENCES

- Chen, H.I. and Sudol, M. 1995. The WW domain of Yes-associated protein binds a proline-rich ligand that differs from the consensus established for Src homology 3-binding modules. Proc. Natl. Acad. Sci. USA 92: 7819-7823.
- Pirozzi, G., McConnell, S.J., Uveges, A.J., Carter, J.M., Sparks, A.B., Kay, B.K. and Fowlkes, D.M. 1997. Identification of novel human WW domaincontaining proteins by cloning of ligand targets. J. Biol. Chem. 272: 14611-14616.
- Chen, H.I., Einbond, A., Kwak, S.J., Linn, H., Koepf, E., Peterson, S., Kelly, J.W. and Sudol, M. 1997. Characterization of the WW domain of human yes-associated protein and its polyproline-containing ligands. J. Biol. Chem. 272: 17070-17077.
- 4. Deeb, S.S. 2005. The molecular basis of variation in human color vision. Clin. Genet. 67: 369-377.
- 5. Ross, M.T., et. al., 2005. The DNA sequence of the human X chromosome. Nature 434: 325-337.
- Hayashi, T., Kubo, A., Takeuchi, T., Gekka, T., Goto-Omoto, S. and Kitahara, K. 2006. Novel form of a single X-linked visual pigment gene in a unique dichromatic color-vision defect. Vis. Neurosci. 23: 411-417.
- Augui, S., Filion, G.J., Huart, S., Nora, E., Guggiari, M., Maresca, M., Stewart, A.F. and Heard, E. 2007. Sensing X chromosome pairs before X inactivation via a novel X-pairing region of the Xic. Science 318: 1632-1636.

CHROMOSOMAL LOCATION

Genetic locus: WBP5 (human) mapping to Xq22.2.

SOURCE

WBP5 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of WBP 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-244602 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

WBP5 (C-14) is recommended for detection of WBP5 of human and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with WBP1 or WBP2.

WBP5 (C-14) is also recommended for detection of WBP5 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for WBP5 siRNA (h): sc-91120, WBP5 shRNA Plasmid (h): sc-91120-SH and WBP5 shRNA (h) Lentiviral Particles: sc-91120-V.

Molecular Weight of WBP5: 13 kDa.

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) Immunofluo-rescence: 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.

STORAGE

Store at 4° C, **D0 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.