WBP2 (C-6): sc-514246



The Power to Question

BACKGROUND

WW domain-binding protein 2 (WBP2) is a 261 amino acid protein expressed in most tissues. 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. WBP2 binds to the WW domain of Yes-associated protein (YAP), WW domain containing E3 ubiquitin protein ligase 1 (AIP5) and WW domain containing E3 ubiquitin protein ligase 2 (AIP2). The gene encoding WBP2 is located on human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes, some of which are involved in tumor suppression and in the pathogenesis of Li-Fraumeni syndrome, early onset breast cancer and a predisposition to cancers of the ovary, colon, prostate gland and fallopian tubes.

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.
- 2. Pirozzi, G., et al. 1997. Identification of novel human WW domain-containing proteins by cloning of ligand targets. J. Biol. Chem. 272: 14611-14616.
- Chen, H.I., et al. 1997. Characterization of the WW domain of human yes-associated protein and its polyproline-containing ligands. J. Biol. Chem. 272: 17070-17077.
- 4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606962. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Seo, M.D., et al. 2007. Identification of the WW domain-interaction sites in the unstructured N-terminal domain of EBV LMP 2A. FEBS Lett. 581: 65-70.
- Raikwar, N.S. and Thomas, C.P. 2008. Nedd4-2 isoforms ubiquitinate individual epithelial sodium channel subunits and reduce surface expression and function of the epithelial sodium channel. Am. J. Physiol. Renal Physiol. 294: F1157-F1165.
- 7. Qin, H., et al. 2008. Identification and structural mechanism for a novel interaction between a ubiquitin ligase WWP1 and Nogo-A, a key inhibitor for central nervous system regeneration. Biochemistry 47: 13647-13658.

CHROMOSOMAL LOCATION

Genetic locus: WBP2 (human) mapping to 17q25.1; Wbp2 (mouse) mapping to 11 E2.

SOURCE

WBP2 (C-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 129-150 within an internal region of WBP2 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 μg IgG_{2b} lambda light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-514246 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

WBP2 (C-6) is recommended for detection of WBP2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Suitable for use as control antibody for WBP2 siRNA (h): sc-93955, WBP2 siRNA (m): sc-155243, WBP2 shRNA Plasmid (h): sc-93955-SH, WBP2 shRNA Plasmid (m): sc-155243-SH, WBP2 shRNA (h) Lentiviral Particles: sc-93955-V and WBP2 shRNA (m) Lentiviral Particles: sc-155243-V.

Molecular Weight of WBP2: 28 kDa.

Positive Controls: WBP2 (h): 293 Lysate: sc-111002, HeLa whole cell lysate: sc-2200 or K-562 whole cell lysate: sc-2203.

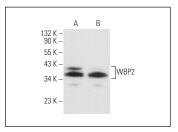
RECOMMENDED SUPPORT REAGENTS

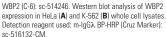
To ensure optimal results, the following support reagents are recommended:

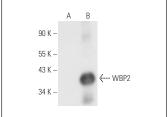
1) Western Blotting: use m-lgGλ BP-HRP: sc-516132 or m-lgGλ BP-HRP (Cruz Marker): sc-516132-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

3) Immunofluorescence: use m-lgGλ BP-FITC: sc-516185 or m-lgGλ BP-PE: sc-516186 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA







WBP2 (C-6): sc-514246. Western blot analysis of WBP2 expression in non-transfected: sc-110760 (A) and human WBP2 transfected: sc-111002 (B) 293 whole cell lysates.

RESEARCH USE

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