

UBCE7IP4 (N-23): sc-130282

BACKGROUND

Ubiquitination is an important mechanism through which three classes of enzymes act in concert to target short-lived or abnormal proteins for destruction. The three classes of enzymes involved in ubiquitination are the ubiquitin-activating enzymes (E1s), the ubiquitin-conjugating enzymes (E2s) and the ubiquitin-protein ligases (E3s). UBCE7IP4 (Ubiquitin-conjugating enzyme 7-interacting protein 4), also known as RNF144A (RING finger protein 144A), KIAA0161 or RNF144, is a 292 amino acid single-pass membrane protein that contains one RING-type zinc finger and two IBR-type zinc fingers. Functioning as an E3 ubiquitin-protein ligase, UBCE7IP4 accepts ubiquitin (in the form of a thioester) from E2 ubiquitin-conjugating enzymes, such as UBC8 and UBCH7, and transfers that ubiquitin residue to target substrates. Via its RING finger, UBCE7IP4 may play a role in protein-DNA and protein-protein interactions throughout the cell.

REFERENCES

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- Nagase, T., Seki, N., Ishikawa, K., Tanaka, A. and Nomura, N. 1996. Prediction of the coding sequences of unidentified human genes. V. The coding sequences of 40 new genes (KIAA0161-KIAA0200) deduced by analysis of cDNA clones from human cell line KG-1. *DNA Res.* 3: 17-24.
- Martinez-Noel, G., Niedenthal, R., Tamura, T. and Harbers, K. 1999. A family of structurally related RING finger proteins interacts specifically with the ubiquitin-conjugating enzyme UbcM4. *FEBS Lett.* 454: 257-261.
- Lorick, K.L., Jensen, J.P., Fang, S., Ong, A.M., Weissman, A.M., and Hatakeyama, S. 1999. RING fingers mediate ubiquitin-conjugating enzyme (E2)-dependent ubiquitination. *Proc. Natl. Acad. Sci. USA* 96: 11364-11369.
- Hoja, M.R., Wahlestedt, C. and Höög, C. 2000. A visual intracellular classification strategy for uncharacterized human proteins. *Exp. Cell Res.* 259: 239-246.

CHROMOSOMAL LOCATION

Genetic locus: RNF144A (human) mapping to 2p25.2.

SOURCE

UBCE7IP4 (N-23) is a purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of UBCE7IP4 of human origin.

PRODUCT

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

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.

APPLICATIONS

UBCE7IP4 (N-23) is recommended for detection of UBCE7IP4 of human and hamster 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), immunohistochemistry (including paraffin-embedded sections) (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 UBCE7IP4 siRNA (h): sc-94470, UBCE7IP4 shRNA Plasmid (h): sc-94470-SH and UBCE7IP4 shRNA (h) Lentiviral Particles: sc-94470-V.

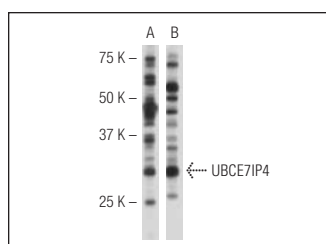
Molecular Weight of UBCE7IP4: 33 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or CHO whole cell lysate.

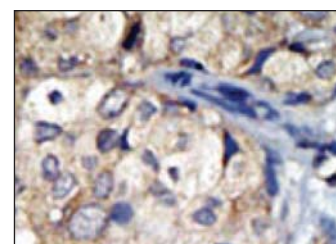
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



UBCE7IP4 (N-23): sc-130282. Western blot analysis of UBCE7IP4 expression in HeLa (A) and CHO (B) whole cell lysates.



UBCE7IP4 (N-23): sc-130282. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cancer tissue showing cytoplasmic staining.

RESEARCH USE

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