

UIP1 (G-14): sc-162380

BACKGROUND

UIP1 (UCHL5-interacting protein, HAUS augmin-like complex subunit 7) is a 368 amino acid product of the human HAUS7 gene. UIP1 is subunit 7 of the HAUS augmin-like complex, which is involved with regulation of spindle assembly during mitosis and contributes to the integrity of the centrosome. The HAUS augmin-like complex associates with the γ -tubulin ring complex. This interaction is required for spindle assembly. UIP1 also binds to UCHL5 (ubiquitin carboxyl-terminal hydrolase isozyme L5) which is a protease that specifically cleaves "Lys-48"-linked polyubiquitin chains. UIP1 localizes to the centrosome during interphase and becomes part of the spindle microtubules during mitosis. Detectable levels of expression have been found in spleen, thymus, testis, ovary, small intestine and colon tissues.

REFERENCES

- Esposito, T., Ciccodicola, A., Flagiello, L., Matarazzo, M.R., Migliaccio, C., Cifarelli, R.A., Visone, R., Campanile, C., Mazzarella, R., Schlessinger, D., D'Urso, M. and D'Esposito, M. 1997. Expressed STSs and transcription of human Xq28. *Gene* 187: 185-191.
- Li, T., Duan, W., Yang, H., Lee, M.K., Bte Mustafa, F., Lee, B.H. and Teo, T.S. 2001. Identification of two proteins, S14 and UIP1, that interact with UCH37. *FEBS Lett.* 488: 201-205.
- Wang, B., Malik, R., Nigg, E.A. and Körner, R. 2008. Evaluation of the low-specificity protease elastase for large-scale phosphoproteome analysis. *Anal. Chem.* 80: 9526-9533.
- Dephoure, N., Zhou, C., Villen, J., Beausoleil, S.A., Bakalarski, C.E., Elledge, S.J. and Gygi, S.P. 2008. A quantitative atlas of mitotic phosphorylation. *Proc. Natl. Acad. Sci. USA* 105: 10762-10767.
- Lawo, S., Bashkurov, M., Mullin, M., Ferreria, M.G., Kittler, R., Habermann, B., Tagliaferro, A., Poser, I., Hutchins, J.R., Hegemann, B., Pinchev, D., Buchholz, F., Peters, J.M., Hyman, A.A., Gingras, A.C. and Pelletier, L. 2009. HAUS, the 8-subunit human Augmin complex, regulates centrosome and spindle integrity. *Curr. Biol.* 19: 816-826.
- Uehara, R., Nozawa, R.S., Tomioka, A., Petry, S., Vale, R.D., Obuse, C. and Goshima, G. 2009. The augmin complex plays a critical role in spindle microtubule generation for mitotic progression and cytokinesis in human cells. *Proc. Natl. Acad. Sci. USA* 106: 6998-7003.
- Mayya, V., Lundgren, D.H., Hwang, S.I., Rezaul, K., Wu, L., Eng, J.K., Rodionov, V. and Han, D.K. 2009. Quantitative phosphoproteomic analysis of T cell receptor signaling reveals system-wide modulation of protein-protein interactions. *Sci. Signal.* 2: ra46.

CHROMOSOMAL LOCATION

Genetic locus: HAUS7 (human) mapping to Xq28; Haus7 (mouse) mapping to X A7.3.

SOURCE

UIP1 (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of UIP1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-162380 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

UIP1 (G-14) is recommended for detection of UIP1 of mouse, rat and human 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 UIP5.

UIP1 (G-14) is also recommended for detection of UIP1 in additional species, including equine.

Suitable for use as control antibody for UIP1 siRNA (h): sc-91088, UIP1 siRNA (m): sc-154912, UIP1 shRNA Plasmid (h): sc-91088-SH, UIP1 shRNA Plasmid (m): sc-154912-SH, UIP1 shRNA (h) Lentiviral Particles: sc-91088-V and UIP1 shRNA (m) Lentiviral Particles: sc-154912-V.

Molecular Weight of UIP1: 41 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) Immunofluorescence: 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, ****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.



Try **UIP1 (C-2): sc-393259**, our highly recommended monoclonal alternative to UIP1 (G-14).