SANTA CRUZ BIOTECHNOLOGY, INC.

UIP1 (C-2): sc-393259



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 micro-tubules during mitosis. Detectable levels of expression have been found in spleen, thymus, testis, ovary, small intestine and colon tissues.

REFERENCES

BACKGROUND

- 1. Esposito, T., et al. 1997. Expressed STSs and transcription of human Xq28. Gene 187: 185-191.
- Li, T., et al. 2001. Identification of two proteins, S14 and UIP1, that interact with UCH37. FEBS Lett. 488: 201-205.
- Wang, B., et al. 2008. Evaluation of the low-specificity protease elastase for large-scale phosphoproteome analysis. Anal. Chem. 80: 9526-9533.
- Dephoure, N., et al. 2008. A quantitative atlas of mitotic phosphorylation. Proc. Natl. Acad. Sci. USA 105: 10762-10767.
- Lawo, S., et al. 2009. HAUS, the 8-subunit human Augmin complex, regulates centrosome and spindle integrity. Curr. Biol. 19: 816-826.
- Uehara, R., et al. 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.

CHROMOSOMAL LOCATION

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

SOURCE

UIP1 (C-2) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of UIP1 of mouse origin.

PRODUCT

Each vial contains 200 μg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

UIP1 (C-2) is available conjugated to agarose (sc-393259 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393259 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393259 PE), fluorescein (sc-393259 FITC), Alexa Fluor[®] 488 (sc-393259 AF488), Alexa Fluor[®] 546 (sc-393259 AF546), Alexa Fluor[®] 594 (sc-393259 AF594) or Alexa Fluor[®] 647 (sc-393259 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-393259 AF680) or Alexa Fluor[®] 790 (sc-393259 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

UIP1 (C-2) is recommended for detection of UIP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

Positive Controls: UIP1 (m): 293T Lysate: sc-124465, NIH/3T3 whole cell lysate: sc-2210 or CSMLO whole cell lysate: sc-364369.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM 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-lgG κ BP-FITC: sc-516140 or m-lgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA





UIP1 (C-2): sc-393259. Western blot analysis of UIP1 expression in NIH/3T3 (A), CSMLO (B) and F9 (C) whole cell lysates. UIP1 (C-2): sc-393259. Western blot analysis of UIP1 expression in non-transfected: sc-117752 (\hat{A}) and mouse UIP1 transfected: sc-124465 (\hat{B}) 293T whole cell lysates.

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 for detailed protocols and support products.