

HURP (D-15): sc-68539

BACKGROUND

HURP (hepatoma up-regulated protein), also known as DLGAP5 (disks large-associated protein 5), DLG7 or DLG1, is an 846 amino acid protein that localizes to both the nucleus and the cytoplasm, specifically localizing to spindle poles in mitotic cells. Expressed in testis, colon, bone marrow, placenta and fetal liver, HURP is thought to function as a cell cycle regulator that interacts with Cdc2 p34 and mediates adherens junction assembly and differentiation in epithelial cells. HURP is upregulated in the G₂/M phase of the cell cycle and may play a role in carcinogenesis and tumor transformation via cell cycle control. Upon DNA damage, HURP is phosphorylated by ATM or ATR. Additionally, HURP is subject to ubiquitin-induced proteasomal degradation. Two isoforms of HURP exist due to alternative splicing events.

REFERENCES

1. Bassal, S., et al. 2001. Characterization of a novel human cell-cycle-regulated homologue of *Drosophila* DLG1. *Genomics* 77: 5-7.
2. Chiu, A.W., et al. 2002. Potential molecular marker for detecting transitional cell carcinoma. *Urology* 60: 181-185.
3. Huang, Y.L., et al. 2003. Prognostic significance of hepatoma-up-regulated protein expression in patients with urinary bladder transitional cell carcinoma. *Anticancer Res.* 23: 2729-2733.
4. Silljé, H.H., et al. 2006. HURP is a Ran-importin β -regulated protein that stabilizes kinetochore microtubules in the vicinity of chromosomes. *Curr. Biol.* 16: 731-742.
5. Koffa, M.D., et al. 2006. HURP is part of a Ran-dependent complex involved in spindle formation. *Curr. Biol.* 16: 743-754.
6. Wilde, A. 2006. "HURP on" we're off to the kinetochore! *J. Cell Biol.* 173: 829-831.
7. Wong, J. and Fang, G. 2006. HURP controls spindle dynamics to promote proper interkinetochore tension and efficient kinetochore capture. *J. Cell Biol.* 173: 879-891.
8. Santarella, R.A., et al. 2007. HURP wraps microtubule ends with an additional tubulin sheet that has a novel conformation of tubulin. *J. Mol. Biol.* 365: 1587-1595.

CHROMOSOMAL LOCATION

Genetic locus: DLGAP5 (human) mapping to 14q22.3; Dlgap5 (mouse) mapping to 14 C1.

SOURCE

HURP (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HURP 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-68539 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HURP (D-15) is recommended for detection of HURP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

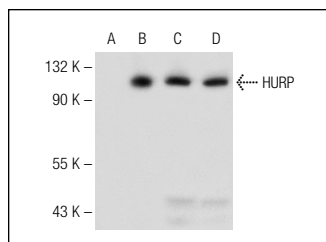
HURP (D-15) is also recommended for detection of HURP in additional species, including equine and porcine.

Suitable for use as control antibody for HURP siRNA (h): sc-75316, HURP siRNA (m): sc-75317, HURP shRNA Plasmid (h): sc-75316-SH, HURP shRNA Plasmid (m): sc-75317-SH, HURP shRNA (h) Lentiviral Particles: sc-75316-V and HURP shRNA (m) Lentiviral Particles: sc-75317-V.

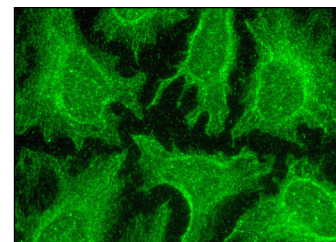
Molecular Weight of HURP: 118 kDa.

Positive Controls: HURP (h): 293T Lysate: sc-111164, Caco-2 cell lysate: sc-2262 or MCF7 whole cell lysate: sc-2206.

DATA



HURP (D-15): sc-68539. Western blot analysis of HURP expression in non-transfected 293T: sc-117752 (A), human HURP transfected 293T: sc-111164 (B), MCF7 (C) and Caco-2 (D) whole cell lysates.



HURP (D-15): sc-68539. Immunofluorescence staining of formalin-fixed HeLa cells showing nuclear and cytoplasmic localization.

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.

MONOS
Satisfaction
Guaranteed

Try **HURP (E-7): sc-377004** or **HURP (D-12): sc-376760**, our highly recommended monoclonal alternatives to HURP (D-15).