Journal of Experimental & Clinical Cancer Research

CORRECTION

Open Access

Correction to: RNA binding protein HuD promotes autophagy and tumor stress survival by suppressing mTORC1 activity and augmenting ARL6IP1 levels

Kausik Bishayee[1], Khadija Habib[1], Uddin Md. Nazim[1], Jieun Kang[1], Aniko Szabo[2], Sung- Oh Huh[1*] and Ali Sadra[1*]

Correction to: J Exp Clin Cancer Res 41, 18 (2022) https://doi.org/10.1186/s13046-021-02203-2

Following publication of the original article [1], the authors identified minor errors in Fig. 7, Fig. S8 and Fig. S11. Specifically:

- Fig. 7i: plotting errors in the histogram; the histogram has been corrected
- Fig. S8d: western blots (right hand side) replaced with correct blots
- Fig. S11: raw western blots presented for Fig.S8d have been replaced with correct blots

The corrected figure is given here. The correction does not have any effect on the final conclusions of the paper. The original article has been corrected.

Supplementary Information

The online version contains supplementary material available at https://doi.org/10.1186/s13046-022-02275-8.

Additional file 1: Fig. S8 mTORC1's inhibitory effect on HuD. **A**. Comparison between mouse neuroblastoma and neurons under stress; Akt-mTOR pathway examined by Western blot assay. Full-length blots are presented in Supplementary Figure S11. **B.** Viability assay (control or miR375 mimic or miR375 inhibitor) in IMR-32 cells. **C.** Relative mRNA expression quantified by RT-qPCR (control or miR375 inhibitor and/or active mTOR via Rheb S16H construct and/or inactive mTOR via rapamycin-25 nM) in IMR-32 cells. **D.** Western blot analysis of HuD and pS6 in IMR-32 cells. Full-length blots are presented in Supplementary Figure S11. Data are presented as mean ± SEM; t test: $*p < 0.05$, $**p < 0.01$, $***p < 0.001$. **Fig. S11** Raw Western blot images for Fig. S5, S6 and S8.

Author details
[1]Department of Pharmacology, College of Medicine, Institute of Natural Medicine, Hallym University, Chuncheon, South Korea. [2]Department of Anatomy, Alfaisal University, College of Medicine, Riyadh, Kingdom of Saudi Arabia.

Published online: 08 February 2022

Reference

1. Bishayee K, Habib K, Nazim UM, et al. RNA binding protein HuD promotes autophagy and tumor stress survival by suppressing mTORC1 activity and augmenting ARL6IP1 levels. J Exp Clin Cancer Res. 2022;41:18 https://doi.org/10.1186/s13046-021-02203-2.

The original article can be found online at https://doi.org/10.1186/s13046-021-02203-2.

*Correspondence: s0huh@hallym.ac.kr; alisadra@hallym.ac.kr
[1] Department of Pharmacology, College of Medicine, Institute of Natural Medicine, Hallym University, Chuncheon, South Korea
Full list of author information is available at the end of the article

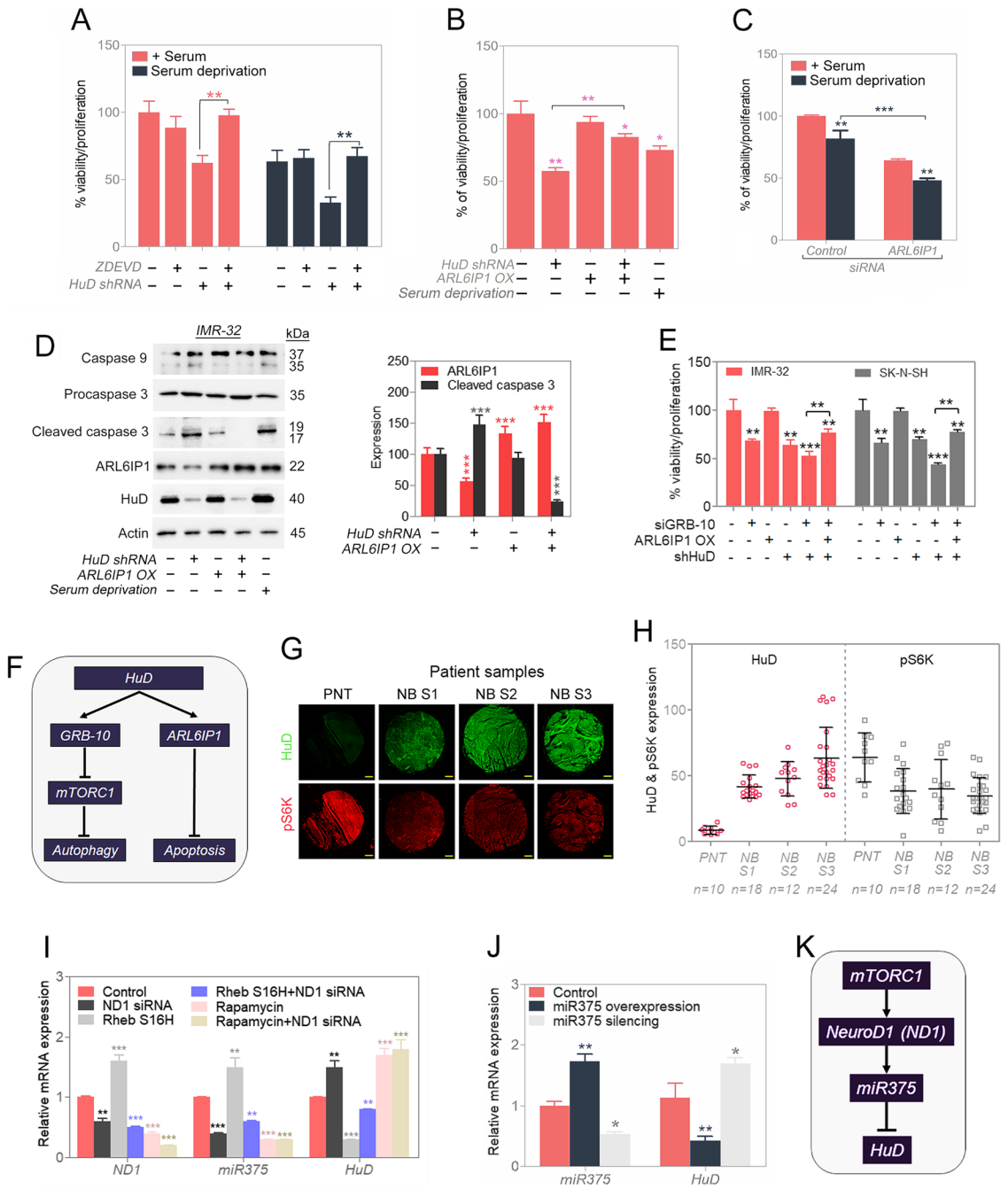

Fig. 7 HuD produces a pro-survival signal. **A** Viability in stress condition in presence of pan-caspase inhibitor (control or silenced HuD and/or ZDEVD) in IMR-32 cells. **B** Efficiency of ARL6IP1 for controlling cell viability in IMR-32 cells (control or silenced HuD and/or overexpressed ARL6IP1). **C** Validation for efficiency of ARL6IP1 in stress condition (control or silenced ARL6IP1) in IMR-32 cells. **D** Western blot analysis for apoptosis-related protein (control or silenced HuD and/or overexpressed ARL6IP1); serum deprivation was a positive control and relative quantifications shown. Full-length blots are presented in Supplementary Fig. S10. **E** Viability assay (control or silenced HuD and/or silenced GRB-10 and/or overexpressed ARL6IP1) in IMR-32 and SK-N-SH cells. **F** Proposed schematic pathway for inhibition of cell death by HuD. **G** and **H** Immunostaining of HuD and pS6K in peripheral nerve tissue (PNT) and neuroblastoma (NB) patient of different stages, corresponding stage-wise expression quantification of HuD and pS6K levels are presented. Scale bar corresponds to 200 µm. **I** Relative mRNA expression quantified by RT-qPCR (control or silenced ND1 and/or active mTORC1 via Rheb S16H construct and/or inactive mTOR via rapamycin-25 nM) in IMR-32 cells. **J** Relative mRNA expression quantified by RT-qPCR (control or miR375 mimic or miR375 inhibitor) in IMR-32 cells. **K** Proposed schematic pathway for inhibition of HuD by mTOR. Data are presented as mean ± SEM; t-test: *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$