Supplementary Data

Rab6 is a Modulator of the Unfolded Protein Response: Implications for Alzheimer’s Disease

Hyung Lim Elfrink, Rob Zwart, María L. Cavanillas, Adam Jay Schindler, Frank Baas, and Wiep Scheper

*Department of Genome Analysis, Academic Medical Center, Amsterdam, The Netherlands
+Department of Biology, Duke University, Durham, North Carolina, NC, USA
+Department of Neurology, Academic Medical Center, Amsterdam, The Netherlands

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*Correspondence to: Wiep Scheper, Department of Genome Analysis, Academic Medical Center, P.O. Box 22660, 1100 DD Amsterdam, The Netherlands. Tel.: +31 20 566 4959; Fax: +31 20 566 9312; E-mail: w.scheper@amc.uva.nl.

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Supplementary Figure 1. Stable inducible Rab6 Q72R overexpression attenuates UPR induction. A) TREx-HeLa-Rab6 Q72R cells were cultured in the absence (−Tet) or presence (+Tet) of tetracycline and overexpression of Rab6 Q72R was assessed by Western blotting. ER stress was induced by treatment with 0.1, 0.2, or 0.5 μg/mL tunicamycin for 20 h. B) Upregulation of the UPR marker BiP was analyzed on Western blot. Equal amounts of protein were loaded in each lane and eEF2 was used as a loading control. C) The increase in CHOP positive nuclei was assessed by immunofluorescence. Nuclei were counterstained with DAPI.

Supplementary Figure 2. Rab6 overexpression alleviates UPR induced toxicity. HeLa cells were transfected with Rab6 or empty vector (mock) and the UPR was induced by tunicamycin treatment as indicated. The effect of Rab6 overexpression on tunicamycin induced cell toxicity was determined by phase contrast microscopy. Representative pictures of n=6 wells are shown.
Supplementary Figure 3. ATF6 cleavage is elevated at higher tunicamycin concentrations. CHO-ATF6 cells were treated with the indicated concentrations tunicamycin for 6h and ATF6 cleavage was assessed on Western blot in biological duplicate. Equal amounts of protein were loaded in each lane and actin was used as a loading control.