Supplementary Data

A Nuclear Function for the Presenilin 1 Neuronal Partner NPRAP/δ-Catenin

Carolina Koutras\textsuperscript{a,b}, Christian B. Lessard\textsuperscript{b,c} and Georges Lévesque\textsuperscript{a,}\textsuperscript{*}

\textsuperscript{a}Department of Psychiatry-Neurosciences, Faculty of Medicine, Laval University and Neuroscience Unit, CHUL, QC, Canada
\textsuperscript{b}Tanz Centre for Research in Neurodegenerative Diseases, University of Toronto, Toronto, Canada
\textsuperscript{c}Department of Neurosciences, University of California at San Diego, La Jolla, California, USA

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WESTERN BLOT

Protein expression was validated using western blot analysis. Briefly, cells were centrifuged for 5 min at 1,000 \( \times \) g and resuspended in 500 \( \mu \)l of STEN buffer (50 mM Tris, pH 7.6, 150 mM NaCl, 2 mM EDTA, 0.2% NP-40 and 0.5% Triton) supplemented with a protease inhibitor cocktail (Complete\textsuperscript{®}, Roche). After 30 min of incubation with agitation at 4°C, lysates were passed several times through a 25-gauge needle and centrifuged at 12,000 rpm for 10 min (4°C). The protein concentration of the supernatant was determined using Bradford reagent (Biorad). Equal amounts of protein were mixed with Laemmli buffer, boiled at 95°C for 5 min, separated using 10% SDS-PAGE and transferred to a polyvinylidene difluoride (PVDF) membrane. Membranes were incubated in 5% non-fat milk in a Tris-buffered solution containing 0.1% Tween (TBS-T) for 1 h and subsequently probed with a mouse anti-Xpress tag antibody (Invitrogen). After a series of washes in TBS-T, the membrane was re-probed with a donkey anti-mouse antibody conjugated to horseradish peroxidase (SantaCruz) for 1 h. Proteins were visualized using an ECL reagent (Perkin Elmer).
δ-catenin modulates gene expression

Supplementary Figure S1. Related to Table 1. Western blot analysis of NPRAP expression in samples subjected to microarray hybridization. NPRAP expression in cells transfected either with an empty vector or an NPRAP-encoding vector (lanes 1 and 2) was compared to a cell line stably overexpressing NPRAP (lane 3) as a control for NPRAP expression. Cells from lanes 1 and 2 conditions were further subjected to RNA extraction and microarray hybridization. This protein expression verification was performed in all samples subjected to microarray analysis.

Supplementary Table S1
Related to Tables 1 and 2. An example of biological and pathological processes regulated by NPRAP target genes

<table>
<thead>
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<th>Process</th>
<th>Gene</th>
<th>Role</th>
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<tr>
<td>Alzheimer’s Disease</td>
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<td>Risk factor</td>
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<td>ME0X2</td>
<td>Neurovascular dysfunction</td>
<td>[2]</td>
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<td>PCDH10</td>
<td>Tumor suppressor gene</td>
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REFERENCES


