

Supplementary Figure 6 Levels of protein expression in differentiated PC12 cells and hypoglossal nuceli. (A) Expression levels of XIAP and HCCS were not changed by overexpression of EAAC1. Differentiated PC12 cells were infected by control or EAAC1 adenoviruses. After 48 hr, cells were lysed in lysis buffer and immunoblotted. (B) Protein expression of IAP family proteins (XIAP, c-IAP1, c-IAP2 and NAIP) and IAP binding family proteins (HCCS, Smac/DIABLO and Omi/HtrA2) in control (cont) and injured (inj) hypoglossal nuclei of rats, mice and EAAC1 knockout mice 5 days after axotomy. (C) Immunohistochemical staining of HCCS protein in mouse hypoglossal nuclei. HCCS protein levels were not changed 7 days after axotomy but showed diffuse staining in the injured side (inj) of hypoglossal nucleus. Scale bar, 75 μm (left panel). The right panel showed high-power magnification of control (control) and nerve-injured motor neuron (injured). Scale bar, 20 µm. (D) Immunohistochemical staining of EAAC1 protein in rat hypoglossal nuclei 7 days after nerve injury. EAAC1 protein levels increased in the injured side (injured) of hypoglossal nucleus. Scale bar, 100 µm (left panel). The right panel shows high-power magnification of nerve-injured motor neuron. Scale bar, 15  $\mu$ m. XII, hypoglossal nucleus; cc, central canal.