



Supplemental Figure 1. Simultaneous measurements of D- $[^3\text{H}]\text{aspartate}$ and $^{36}\text{Cl}^-$ release from cultured astrocytes exposed to hypoosmotic medium.

Cells were preloaded overnight with 4 $\mu\text{Ci/ml}$ D- $[^3\text{H}]\text{aspartate}$, washed from extracellular isotope, and then additionally loaded for 2 hrs with 35 $\mu\text{Ci/ml}$ $^{36}\text{Cl}^-$. After wash of extracellular $^{36}\text{Cl}^-$, cells were placed in a Lucite perfusion chamber and perfused with isoosmotic and hypoosmotic media, as indicated. D- $[^3\text{H}]\text{aspartate}$ and $^{36}\text{Cl}^-$ in collected perfusate fractions were counted separately (0-16 keV window for $[^3\text{H}]$ and 16-700 keV for $^{36}\text{Cl}^-$; these settings allow for negligible $[^{36}\text{Cl}^-]$ contribution to $[^3\text{H}]$ counts and no $[^3\text{H}]$ contribution to $[^{36}\text{Cl}^-]$ counts). Because of the high rate of anion exchange in cultured astrocytes, $^{36}\text{Cl}^-$ was strongly depleted in the cells by the first 2-3 minutes of hypoosmotic exposure. Therefore the present data should be considered only qualitatively and mindful of the continuously decreasing $^{36}\text{Cl}^-$ availability. **A**, D- $[^3\text{H}]\text{aspartate}$ and $^{36}\text{Cl}^-$ releases are presented on the same scale. **B**, The same data are presented on different scales for easier comparison of efflux kinetics for both isotopes. Data are means \pm SE of 3 experiments.