

Supplemental Table 6: The commercially available Kit is the most expensive dissociation method. All cumulative data were reviewed to determine the cost of each dissociation method per brain or per spinal cord. When using The Percoll PLUS™ gradient (GE Healthcare Bio-Sciences, Pittsburgh, PA, USA), brains were individually passed through a 70 µm sterile filter to generate a single cell suspension, and then washed in cold PBS. After washing, the single cell suspension was processed using 2 ml of 37% Percoll Plus™, and a 4 ml/2ml of 30/70% Percoll PLUS™ gradient. Cells were then counted using a hemocytometer with Trypan Blue for the discrimination of dead cells.

The commercially available Neural Tissue Dissociation Kit (P) (Kit) was used following the manufacturer's protocol (Neural Tissue Dissociation Kit (P), Miltenyi Biotec, San Diego, CA, USA). 1 ml of accutase (Global Cell Solutions, Charlottesville, VA, USA) was added to the tissues at 1 mL per tissue and incubated at room temperature. 20 U of papain (Sigma-Aldrich, St. Louis, MO, USA) was added per tissue sample. Immediately following the incubation, papain was quenched using 150 µg ovomucoid (Sigma-Aldrich, St. Louis, MO, USA). For the combination of accutase and papain (Accutase 15/Papain 30), 20 U of papain was first added to the brain isolates and incubated for 30 minutes at 37°C. After 30 minutes, the papain was quenched using 1.5 µg ovomucoid. Following all enzymatic dissociation methods, brains were washed with cold PBS, and then subjected to one wash with 37% Percoll PLUS™ to remove remaining myelin. While the commercially available Kit outperformed the other methods regarding many of the pre-defined criteria, it is also by far the most expensive way to dissociate brain and spinal cord tissue.

	Percoll gradients	Commercial dissociation kit w/37%	Accutase w/37%	Papain w/37%
Cost per test	\$1.53	\$7.17	\$0.63	\$1.13