

Supplemental Table 2: The number of mononuclear cells obtained from brain with different dissociation methods. The medians and ranges were determined for the absolute cell numbers and mononuclear cell subsets isolated from the brain, and are shown in descending order for all dissociation paradigms that met the pre-defined criterion of 5×10^5 cells in mice with clinical experimental autoimmune encephalomyelitis (EAE), and that were considered suitable for further analyses by multiparameter flow cytometry. Namely, Kit, accutase 15/papain30, accutase 15, papain 60, papain 15 and papain 30 were determined to be effective brain dissociation methods. Subsequently, these methods were pursued to quantify CD45⁺, CD3⁺, CD4⁺, CD8⁺, CD19⁺, and CD11b⁺ mononuclear cell subpopulations.

	Treatment	Median	Range
Absolute Cell Number	Kit	9.5E+06	1.5E+07
	Accutase 15/Papain 30	3.4E+06	1.2E+07
	Accutase 15	1.1E+06	5.3E+05
	Papain 60	1.0E+06	6.3E+06
	Papain 15	6.3E+05	4.2E+05
	Papain 30	5.0E+05	4.6E+05
CD45 ⁺	Kit	8.7E+05	6.9E+05
	Papain 60	6.3E+05	4.3E+05
	Accutase 15/Papain 30	2.7E+05	1.6E+06
	Accutase 15	2.2E+05	2.0E+05
	Papain 15	7.6E+04	5.9E+04
	Papain 30	5.5E+04	1.1E+05
CD3 ⁺	Papain 60	6.2E+04	1.2E+05
	Accutase 15/Papain 30	2.6E+04	1.6E+05
	Kit	2.1E+04	1.1E+05
	Papain 15	9.7E+03	1.8E+04
	Accutase 15	8.9E+03	1.4E+05
	Papain 30	6.0E+03	3.3E+04
CD4 ⁺	Papain 60	1.6E+04	9.4E+03
	Kit	7.8E+03	1.4E+04
	Accutase 15	6.3E+03	2.3E+04
	Papain 15	4.2E+03	4.0E+03
	Accutase 15/Papain 30	4.1E+03	4.4E+03
	Papain 30	2.3E+03	5.8E+03
CD8 ⁺	Accutase 15/Papain 30	1.4E+03	2.1E+04
	Kit	7.8E+02	2.2E+04
	Papain 60	2.5E+02	2.1E+03
	Papain 15	1.3E+02	2.9E+02
	Papain 30	8.1E+01	3.6E+02
	Accutase 15	1.4E+01	2.8E+03
CD19 ⁺	Kit	7.7E+03	6.2E+04
	Papain 60	4.5E+03	3.1E+03
	Accutase 15/Papain 30	1.3E+03	6.0E+03
	Papain 15	1.1E+03	1.0E+03
	Accutase 15	7.7E+02	1.2E+03
	Papain 30	2.7E+02	2.5E+03
CD11b ⁺	Kit	5.1E+05	1.5E+06
	Papain 60	4.6E+05	9.2E+05
	Accutase 15	2.0E+05	2.2E+05
	Accutase 15/Papain 30	2.0E+05	1.4E+06
	Papain 15	6.1E+04	1.4E+05
	Papain 30	4.6E+04	2.2E+05