

Supplementary Data 1. Effect of $\sigma 1$ agonist, compound 1(S), on peripheral inflammatory state ^a.

	IFN- γ	TNF- α	IL-17a	IL-4
Sham-vehicle	0.57 (± 0.66)	ND	1.05 (± 0.20)	0.57 (± 0.14)
Sham-1(S) 5 mg kg ⁻¹	0.97 (± 0.92)	ND	2.90 (± 0.92)	0.53 (± 0.13)
EAE-vehicle	1.58 (± 7.51)	55.56 (± 453.60)	6.88 (± 33.03)	0.80 (± 2.62)
EAE-1(S) 5 mg kg ⁻¹	1.31 (± 3.55)	117.50 (± 134.84)	4.70 (± 8.37)	0.44 (± 0.75)

^a Quantification of IFN- γ , TNF- α , IL-17a and IL-4 concentration (pg/ml) in serum was performed by ELISA. Sham-vehicle, sham-1(S) 5 mg kg⁻¹, EAE-vehicle and EAE-1(S) 5 mg kg⁻¹ were used with 5–11 animals per treatment group. Mice were immunized to induce EAE and administered compound 1(S) 5 mg kg⁻¹ i.p., as described in Materials and Methods. Sera were collected at the peak of disease (i.e., on day 14 \pm 2), when the clinical score for the EAE-vehicle group was 4.0, and for the EAE-1(S) group was 1.5. Data are presented as median \pm IQR. ND, not detected.