

Supplementary Table 1 *No differences were detected among groups in water T2 values*

Supplementary Table 2 *CNF1 significantly contrasted NAA metabolism abnormalities in the hippocampus of MeCP2-308 mice*

SUPPLEMENTARY TABLES

Table S1 *No differences were detected among groups in water T2 values*

	T2 in Striatum	T2 in Hippocampus
wt control	67.2 ± 1.4	57.9 ± 1.7
wt CNF1	63.5 ± 1.6	59.3 ± 0.5
hz control	65.6 ± 2.5	58.0 ± 0.3
hz CNF1	64.1 ± 1.3	59.2 ± 1.1

Data are means (ms) ± SEM. CNF1 C866S was used as a control.

Table S2 *CNF1 significantly contrasted NAA metabolism abnormalities in the hippocampus of MeCP2-308 mice*

	Cr/PCr [£]	Gln/Glu	NAA/Total NAA ^{\$}
wt control	0.5 ± 0.2	1.0 ± 0.2	0.86 ± 0.02
wt CNF1	0.2 ± 0.1	0.9 ± 0.2	0.89 ± 0.03
hz control	0.8 ± 0.5	0.8 ± 0.2	0.94 ± 0.02
hz CNF1	0.2 ± 0.1	0.7 ± 0.1	0.84 ± 0.03

Cr, Creatine; PCr, phosphocreatine; Gln, glutamine; Glu, glutamate; NAA, Nacetylaspartate; NAAG, Nacetylaspartylglutamate. Effect of treatment: [£]p = .06; Genotype*treatment interaction: ^{\$}p < .05. CNF1 C866S was used as a control. Data are means (mM) ± SEM.