

Supplementary Table S1. Quantification of the integrated density of pixels in anterior tibial muscles and transverse sections of the lumbar spinal cord of 4-week-old mice, after seven days of uninterrupted treatment with CLP290 10 mg•kg⁻¹ day and β -cyclodextrin vehicle.

Antibody	Groups	7-days of treatment with CLP290 - 10 mg•kg ⁻¹
DYSTROPHIN - Muscle fiber	BL-Vehicle	12.56 ± 1.7
	MDX-Vehicle	0.8 ± 0.7
	BL-CLP290	13.7 ± 0.9
	MDX-CLP290	0.4 ± 0.15
GFAP – lamina IX	BL-Vehicle	3.1 x 10 ⁷ ± 1.3 × 10 ⁶
	MDX-Vehicle	4.3 x 10 ⁷ ± 2.2 × 10 ⁶
	BL-CLP290	3.2 x 10 ⁷ ± 2.1 × 10 ⁶
	MDX-CLP290	3.0 x 10 ⁷ ± 1.1 × 10 ⁶
AMPA - Motor nucleus	BL-Vehicle	5.4 x 10 ⁷ ± 1.4 × 10 ⁶
	MDX-Vehicle	6.4 x 10 ⁷ ± 3.2 × 10 ⁶
	BL-CLP290	5.0 x 10 ⁷ ± 1.4 × 10 ⁶
	MDX-CLP290	4.5 x 10 ⁷ ± 1.9 × 10 ⁶
KCC2 - Motor nucleus	BL-Vehicle	8.1 x 10 ⁷ ± 2.2 × 10 ⁶
	MDX-Vehicle	6.0 x 10 ⁷ ± 3.8 × 10 ⁶
	BL-CLP290	9.1 x 10 ⁷ ± 3.6 × 10 ⁶
	MDX-CLP290	1.0 x 10 ⁸ ± 1.3 × 10 ⁶
KCC2 - Plasma membrane	BL-Vehicle	157668 ± 8793
	MDX-Vehicle	134667 ± 8964
	BL-CLP290	187036 ± 10136
	MDX-CLP290	211085 ± 12613
CHAT – Motor neuron body	BL-Vehicle	7.0 x 10 ⁶ ± 5.0 × 10 ⁵
	MDX-Vehicle	1.0 x 10 ⁷ ± 1.0 × 10 ⁶
	BL-CLP290	2.0 x 10 ⁶ ± 3.0 × 10 ⁵
	MDX-CLP290	3.0 x 10 ⁶ ± 5.0 × 10 ⁵
CHAT – Plasma membrane	BL-Vehicle	1.254 ± 0.06
	MDX-Vehicle	1.006 ± 0.06
	BL-CLP290	1.282 ± 0.04
	MDX-CLP290	1.018 ± 0.06
GAD65 - lamina IX	BL-Vehicle	2.3 x 10 ⁷ ± 1.4 × 10 ⁶
	MDX-Vehicle	1.5 x 10 ⁷ ± 4.2 × 10 ⁵
	BL-CLP290	2.9 x 10 ⁷ ± 9.2 × 10 ⁵
	MDX-CLP290	2.6 x 10 ⁷ ± 1.3 × 10 ⁶
GAD65 - Motor nucleus	BL-Vehicle	1.5 x 10 ⁷ ± 1.9 × 10 ⁵
	MDX-Vehicle	1.3 x 10 ⁷ ± 4.0 × 10 ⁵
	BL-CLP290	1.4 x 10 ⁷ ± 3.4 × 10 ⁵
	MDX-CLP290	1.5 x 10 ⁷ ± 4.3 × 10 ⁵
VGLUT1 - Overview	BL-Vehicle	2.6 x 10 ⁷ ± 2.2 × 10 ⁶
	MDX-Vehicle	3.1 x 10 ⁷ ± 1.3 × 10 ⁶
	BL-CLP290	1.9 x 10 ⁷ ± 6.5 × 10 ⁵
	MDX-CLP290	2.1 x 10 ⁷ ± 1.4 × 10 ⁶
VGLUT1 – Anterior column	BL-Vehicle	2.4 x 10 ⁷ ± 1.3 × 10 ⁶
	MDX-Vehicle	3.2 x 10 ⁷ ± 1.4 × 10 ⁶

	BL-CLP290	$1.3 \times 10^7 \pm 9.9 \times 10^5$
	MDX-CLP290	$1.6 \times 10^7 \pm 8.5 \times 10^5$
VGLUT1 – Motor nucleus	BL-Vehicle	$7.7 \times 10^6 \pm 4.1 \times 10^5$
	MDX-Vehicle	$1.0 \times 10^7 \pm 2.3 \times 10^5$
	BL-CLP290	$3.9 \times 10^6 \pm 2.9 \times 10^5$
	MDX-CLP290	$4.3 \times 10^6 \pm 2.3 \times 10^5$