**Supplemental Table 1.** Comparison of spike properties of unidentified MSNs and identified SNr+ MSNs across genotypes.

	Group	Firing rate (Hz)	Spike duration (ms)	Antidromic spike threshold (µA)	Antidromic spike latency (ms)
Unidentified	WT-veh (29 cells)	$0.0051 \pm 0.003$	1.28 ± 0.026	na	na
MSNs	TG5-veh (32 cells)	$0.0814 \pm 0.052$	$1.37 \pm 0.033$	na	na
Identified	WT-veh (17 cells)	$0.0000 \pm 0.000$	1.33 <u>+</u> 0.046	858 <u>+</u> 111	9.9 + 0.9
SNr+ MSNs	TG5-veh (14 cells)	$0.0020 \pm 0.002$	1.32 <u>+</u> 0.061	634 <u>+</u> 92	9.4 + 0.9

Data are presented as mean ± SEM. Data were analyzed using one-way ANOVA (all MSNs) and t-test (SNr+ MSNs). p>0.05 for all comparisons. Abbreviations: MSN, medium-sized spiny neuron; TG5, BAC transgenic HD rats; veh, vehicle; WT, wild-type rats.