

Table S2

Parameter	Hdh ^{Q7/Q7}			Hdh ^{Q140/Q140}		
	Mapk11 ^{+/+}	Mapk11 ^{+/-}	Mapk11 ^{-/-}	Mapk11 ^{+/+}	Mapk11 ^{+/-}	Mapk11 ^{-/-}
RF_StrideLength_(cm)_Mean	5.94 ± 0.31	5.91 ± 0.36	4.87 ± 0.21	5.24 ± 0.22	4.93 ± 0.24	5.48 ± 0.2
RH_MaxContactArea_(cm ²)_Mean	0.42 ± 0.04	0.39 ± 0.04	0.47 ± 0.08	0.34 ± 0.03	0.47 ± 0.02	0.35 ± 0.04
RH_PrintArea_(cm ²)_Mean	0.52 ± 0.04	0.5 ± 0.05	0.56 ± 0.09	0.43 ± 0.03	0.55 ± 0.03	0.43 ± 0.04
RH_StepCycle_(s)_Mean	0.72 ± 0.15	0.64 ± 0.17	0.76 ± 0.12	0.45 ± 0.03	0.57 ± 0.06	0.47 ± 0.05
RH_InitialDualStance_(s)_Mean	0.11 ± 0.02	0.06 ± 0.02	0.16 ± 0.04	0.06 ± 0.01	0.13 ± 0.03	0.1 ± 0.04
LH_MaxContactMeanIntensity_Mean	89.59 ± 1.9	79.1 ± 2.13	84.08 ± 1.99	79.86 ± 1.63	81 ± 1.6	84.55 ± 0.75
LH_PrintArea_(cm ²)_Mean	0.54 ± 0.04	0.59 ± 0.06	0.74 ± 0.07	0.46 ± 0.04	0.63 ± 0.04	0.5 ± 0.05
PhaseDispersions_RF->RH_CStat_R	0.9 ± 0.04	0.96 ± 0.02	0.87 ± 0.11	0.8 ± 0.06	0.87 ± 0.05	0.89 ± 0.06
Couplings_RF->LH_CStat_Mean	31.92 ± 9.43	27.49 ± 18.29	54.49 ± 17.59	14.29 ± 4.91	23.74 ± 10.55	22.49 ± 12.16
Couplings_LF->LH_Mean	58.85 ± 4.62	51.42 ± 1.5	55.48 ± 2.28	51.67 ± 1.87	52.19 ± 1.45	53.63 ± 1.61
Couplings_RH->RF_CStat_Mean	49.74 ± 3.84	52.35 ± 3.8	43.95 ± 2.11	41.26 ± 2.61	46.35 ± 1.13	49.22 ± 3.05
Run_Maximum_Variation_(%)	66.16 ± 6.94	70.4 ± 15.79	64.43 ± 11.43	80.31 ± 5.46	71.41 ± 8.49	49 ± 8.32
RF_MaxContactAt_(%)_Mean	37.67 ± 1.98	47.17 ± 4.95	45.46 ± 2.75	46.28 ± 1.5	47.38 ± 3.33	42.73 ± 4.14
RF_MaxIntensityAt_(%)_Mean	52.72 ± 3.55	49.33 ± 3.53	50.52 ± 2.91	59.65 ± 2.68	54.39 ± 2.26	51.9 ± 3.15
RH_MaxIntensityAt_(%)_Mean	42.66 ± 3.59	46.61 ± 2.24	49.11 ± 5.14	52.98 ± 2.68	47.57 ± 2.53	50.59 ± 3.95
LF_MaxIntensityAt_(%)_Mean	52.2 ± 3.01	58.65 ± 1.44	53.08 ± 2.72	59.29 ± 2.46	51.41 ± 1.51	45.98 ± 2.75
LF_SwingSpeed_(cm/s)_Mean	32.03 ± 2.69	35.86 ± 3.69	33.91 ± 3.96	36.62 ± 2.12	31.58 ± 3.13	35.83 ± 1.57
LH_MaxContactAt_(%)_Mean	27.04 ± 2.09	26.34 ± 2.51	27.54 ± 2.97	33.03 ± 2.5	27.23 ± 2.56	23.19 ± 1.58
LH_MaxIntensityAt_(%)_Mean	41.51 ± 2.79	47.9 ± 4.5	47.47 ± 5.03	49.32 ± 3.12	43.63 ± 2.73	48.38 ± 2.24
StepSequence_NumberOfPatterns	1.91 ± 0.16	2.2 ± 0.2	2.86 ± 0.26	2.5 ± 0.16	2.91 ± 0.34	2.56 ± 0.22
OtherStatistics_NumberOfSteps	13.69 ± 0.56	14.6 ± 1.44	16.29 ± 0.75	15.75 ± 0.66	16.09 ± 1.19	14.5 ± 0.57
OtherStatistics_Cadence	6.64 ± 0.46	7.32 ± 1.01	5.36 ± 0.86	7.59 ± 0.42	6.47 ± 0.55	8.28 ± 0.83
PhaseDispersions_LF->RH_Mean	7.72 ± 2.07	6.33 ± 3.83	10.8 ± 2.83	17.17 ± 5.32	6.57 ± 2.67	10.35 ± 5.32
Couplings_LH->RF_CStat_Mean	55.41 ± 9.93	26.87 ± 18.17	55.21 ± 16.77	81.2 ± 6.99	69.09 ± 11.23	64.94 ± 14.11
Couplings_RH->LF_Mean	67.73 ± 7.82	92.67 ± 4.49	92.63 ± 1.58	84.9 ± 4.81	94.09 ± 3.01	91.72 ± 3.41
Couplings_LH->RH_CStat_Mean	48.3 ± 2.7	53.61 ± 1.59	54.38 ± 2.91	55.59 ± 3.75	50.94 ± 1.85	51.45 ± 1.67

Table S2-Supplementary to Figure 8: gait analysis using single parameters

Among the 214 parameters measured by for gait experiments, we selected all the 26 parameters that showed at least 10% difference between HD and WT mice with marginal ($0.05 < P < 0.2$) or significant ($P < 0.05$, highlighted in yellow) P values by unpaired two-tailed t test. We then tested whether a certain parameter is rescued (green) or exacerbated (orange) by comparing Mapk11^{+/-} or Mapk11^{-/-} with Mapk11^{+/+} in the same Htt background. The judgment was purely based on the direction of the difference between the averages of the compared groups. Data presented as mean \pm SEM in every block.