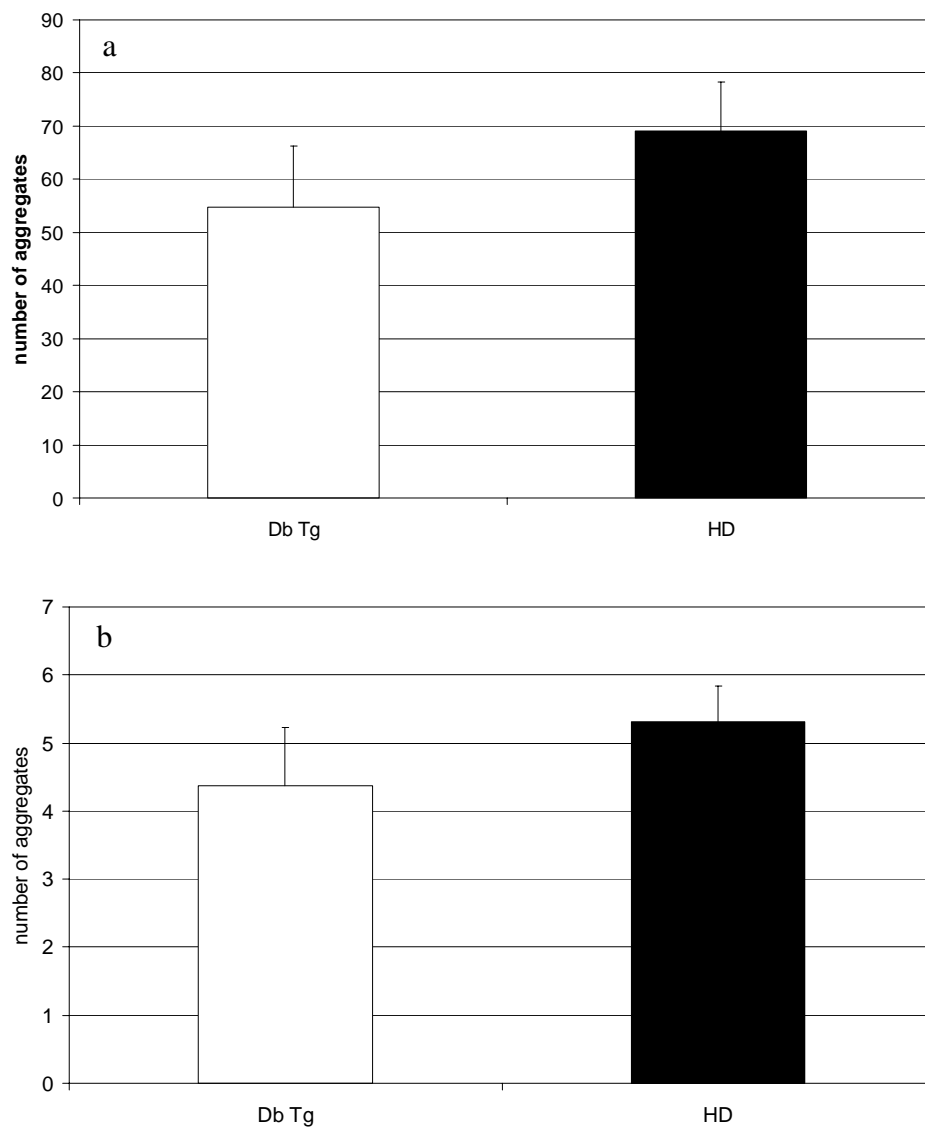
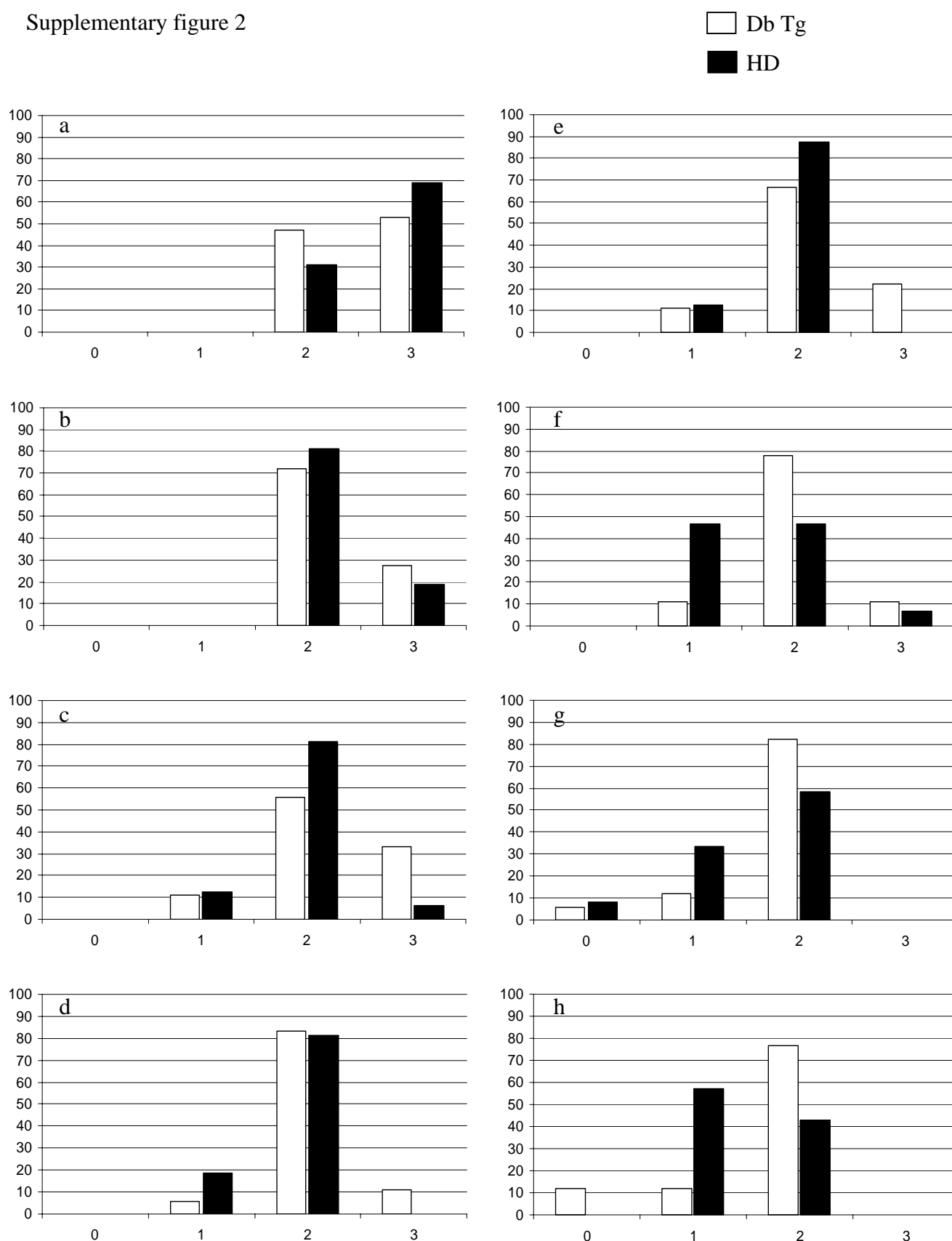


Supplementary figure1



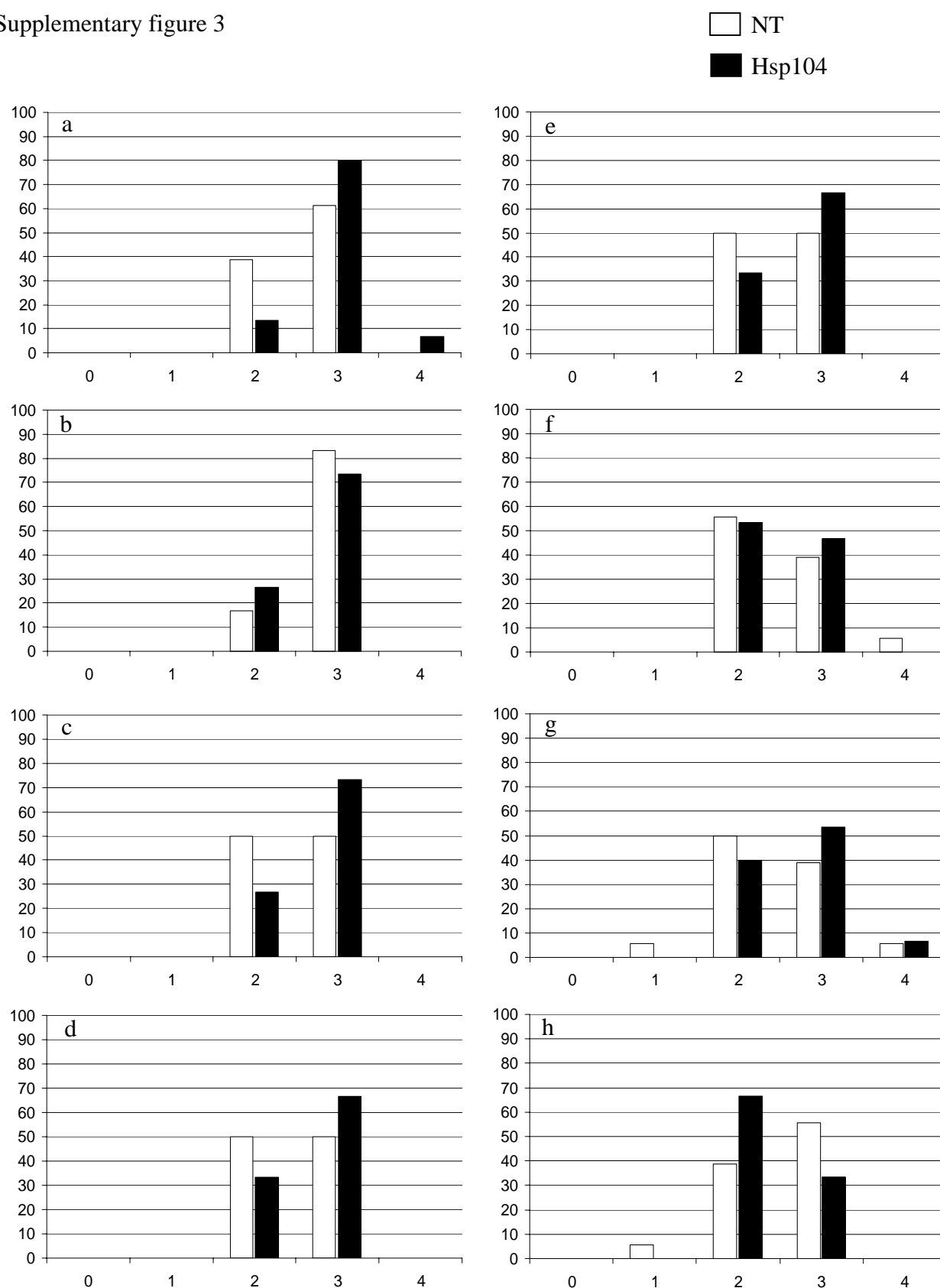
Supplementary figure 1: At 22 weeks, hsp104 overexpression results in a non-significant trend towards fewer aggregates in the brains of mutant huntingtin-expressing mice. a- We counted aggregates in the whole piriform cortex, on both sides of the brain ($p=0.3657$) b-We counted aggregates in 5 separate fields in the striatum, immediately ventral of the external capsule ($p=0.3352$). On both piriform cortex and striatum, quantifications were performed on two Db Tg mice and four HD mice, six brain sections per animal, on both sides of the brain (x60 objective). Error bars show SEM.

Supplementary figure 2



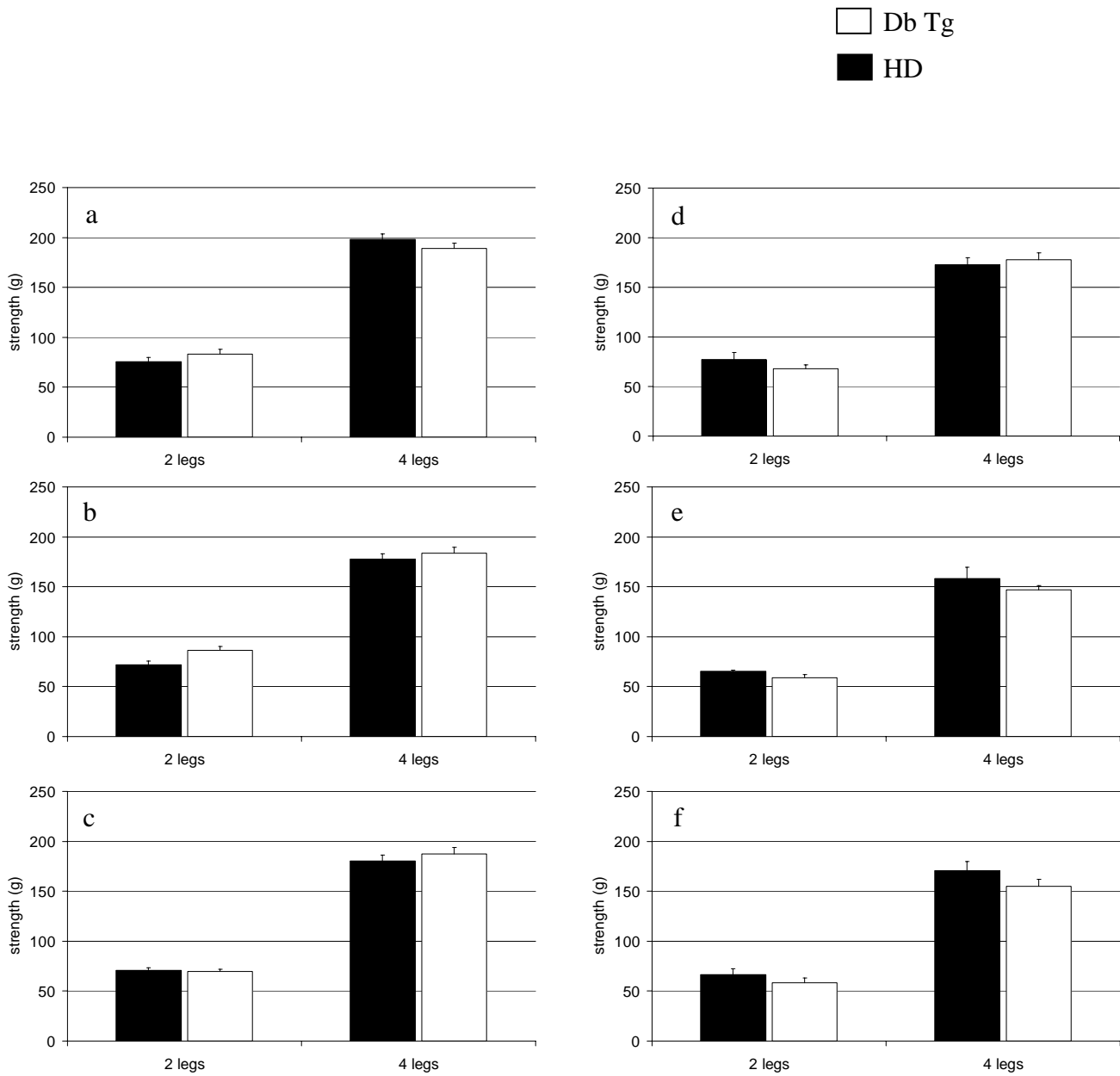
Supplementary figure 2: The expression of hsp104 protein in HD mouse brain has no effect of the grip performances of the animals. Double transgenic (Db Tg): white bars, HD: black bars. Analysis of grip strength by SHIRPA at 4 weeks old (a, $n_{\text{Db Tg}}=18$, $n_{\text{HD}}=16$, $p=0.387$), 12 weeks old (b, $n_{\text{Db Tg}}=18$, $n_{\text{HD}}=16$, $p=0.6538$), 14 weeks old (c, $n_{\text{Db Tg}}=18$, $n_{\text{HD}}=16$, $p=0.2142$), 16 weeks old (d, $n_{\text{Db Tg}}=18$, $n_{\text{HD}}=16$, $p=0.2695$), 18 weeks old (e, $n_{\text{Db Tg}}=18$, $n_{\text{HD}}=16$, $p=0.3006$), 20 weeks old (f, $n_{\text{Db Tg}}=18$, $n_{\text{HD}}=15$, $p=0.0827$), 22 weeks old (g, $n_{\text{Db Tg}}=17$, $n_{\text{HD}}=12$, $p=0.2981$) and 24 weeks old (h, $n_{\text{Db Tg}}=17$, $n_{\text{HD}}=7$, $p=0.3095$).

Supplementary figure 3



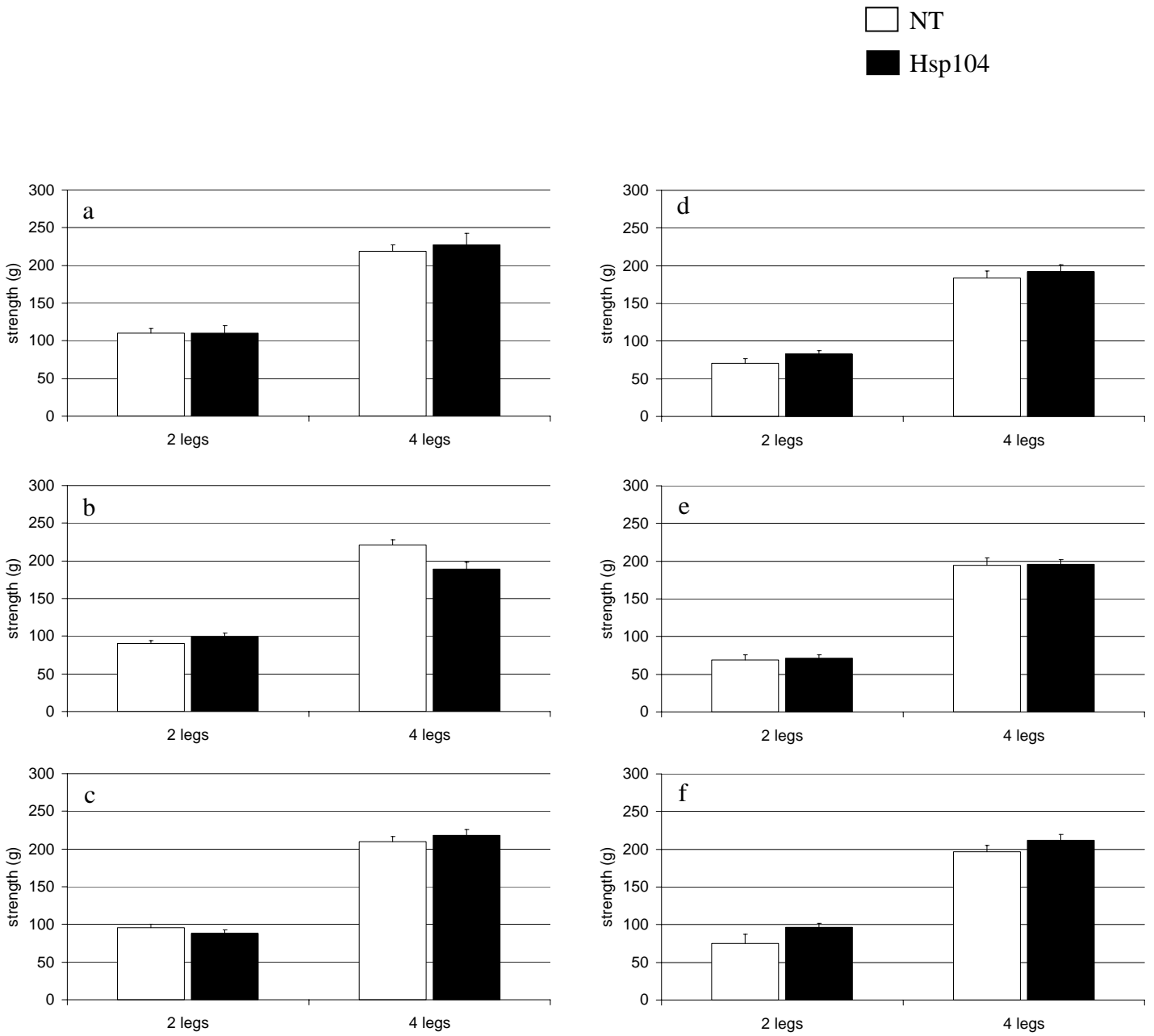
Supplementary figure 3: The expression of hsp104 protein in mouse brain has no effect of the grip performances of animals not expressing mutant huntingtin. Non transgenic (NT): white bars, hsp104: black bars. Analysis of grip strength by SHIRPA at 4 weeks old (a, $n_{NT}=18$, $n_{hsp104}=15$, $p=0.1481$), 12 weeks old (b, $n_{NT}=18$, $n_{hsp104}=15$, $p=0.6255$), 14 weeks old (c, $n_{NT}=18$, $n_{hsp104}=15$, $p=0.2548$), 16 weeks old (d, $n_{NT}=18$, $n_{hsp104}=15$, $p=0.4159$), 18 weeks old (e, $n_{NT}=18$, $n_{hsp104}=15$, $p=0.4159$), 20 weeks old (f, $n_{NT}=18$, $n_{hsp104}=15$, $p=0.9856$), 22 weeks old (g, $n_{NT}=18$, $n_{hsp104}=15$, $p=0.3955$) and 24 weeks old (h, $n_{NT}=18$, $n_{hsp104}=15$, $p=0.3661$).

Supplementary figure 4



Supplementary figure 4: The expression of hsp104 protein in HD mouse brain has no effect of the grip performances of the animals. Double transgenic (Db Tg): white bars, HD: black bars. Analysis of grip strength by grip strength meter (Bioseb) at 14 weeks old (a, $n_{\text{Db Tg}}=4$, $n_{\text{HD}}=6$, $p_{2\text{legs}}=0.4024$, $p_{4\text{legs}}=0.4203$), 16 weeks old (b, $n_{\text{Db Tg}}=4$, $n_{\text{HD}}=5$, $p_{2\text{legs}}=0.0919$, $p_{4\text{legs}}=0.5345$), 18 weeks old (c, $n_{\text{Db Tg}}=10$, $n_{\text{HD}}=7$, $p_{2\text{legs}}=0.7673$, $p_{4\text{legs}}=0.4422$), 20 weeks old (d, $n_{\text{Db Tg}}=7$, $n_{\text{HD}}=3$, $p_{2\text{legs}}=0.3794$, $p_{4\text{legs}}=0.8195$), 22 weeks old (e, $n_{\text{Db Tg}}=6$, $n_{\text{HD}}=2$, $p_{2\text{legs}}=0.4942$, $p_{4\text{legs}}=0.4629$), 24 weeks old (f, $n_{\text{Db Tg}}=6$, $n_{\text{HD}}=4$, $p_{2\text{legs}}=0.5134$, $p_{4\text{legs}}=0.4508$). Error bars show SEM.

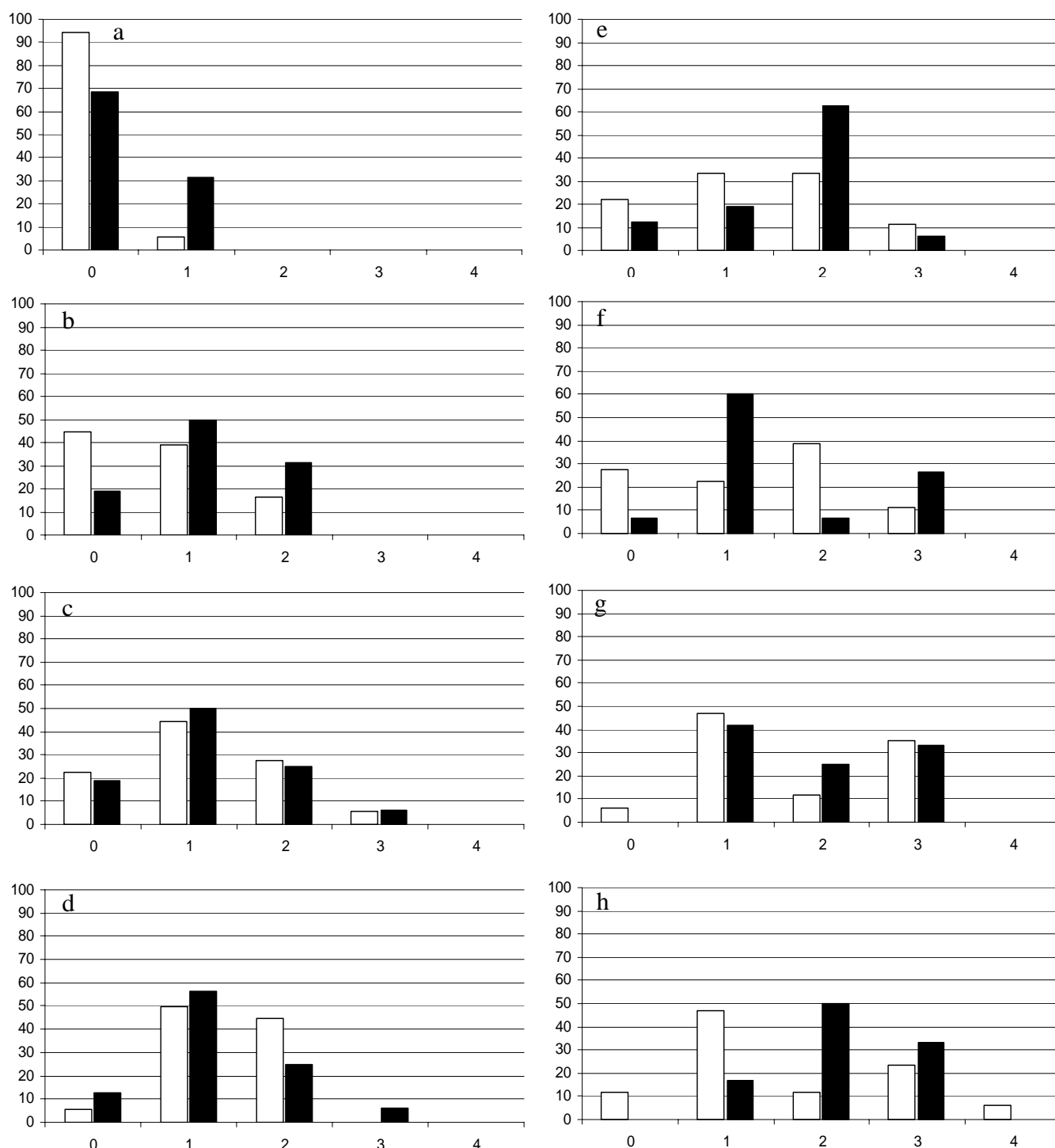
Supplementary figure 5



Supplementary figure 5: The expression of hsp104 protein in mouse brain has no effect of the grip performances of animals not expressing mutant huntingtin. Non transgenic (NT): white bars, hsp104: black bars. Analysis of grip strength by grip strength meter (Bioseb) at 14 weeks old (a, $n_{NT}=5$, $n_{hsp104}=4$, $p_{2legs}=0.9800$, $p_{4legs}=0.7222$), 16 weeks old (b, $n_{NT}=6$, $n_{hsp104}=6$, $p_{2legs}=0.3515$, $p_{4legs}=0.0801$), 18 weeks old (c, $n_{NT}=7$, $n_{hsp104}=10$, $p_{2legs}=0.4907$, $p_{4legs}=0.4337$), 20 weeks old (d, $n_{NT}=3$, $n_{hsp104}=9$, $p_{2legs}=0.2646$, $p_{4legs}=0.7094$), 22 weeks old (e, $n_{NT}=3$, $n_{hsp104}=9$, $p_{2legs}=0.8275$, $p_{4legs}=0.9417$), 24 weeks old (f, $n_{NT}=4$, $n_{hsp104}=15$, $p_{2legs}=0.1483$, $p_{4legs}=0.4725$). Error bars show SEM.

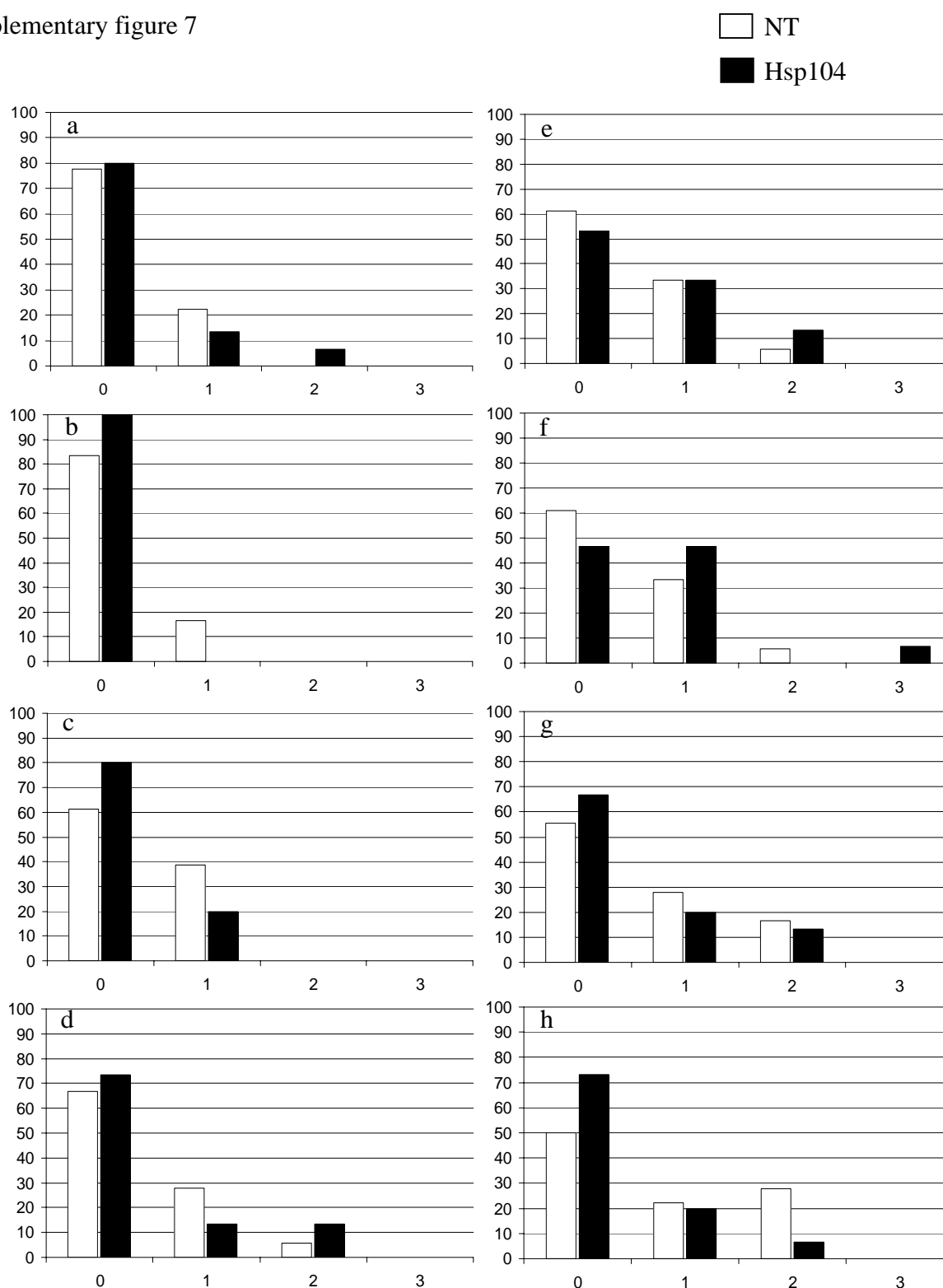
Supplementary figure 6

□ Db Tg
■ HD



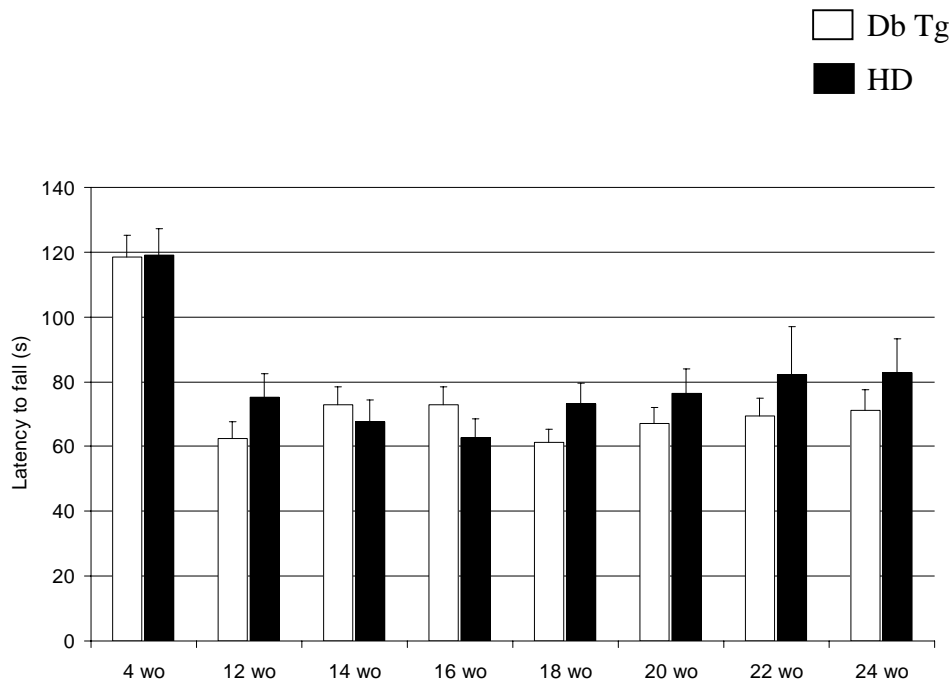
Supplementary figure 6: The expression of hsp104 protein in HD mouse brain has no effect of the wire manoeuvre performances of the animals. Double transgenic (Db Tg): white bars, HD: black bars. a to h- Analysis of wire manoeuvre by SHIRPA at 4 weeks old (a, $n_{\text{Db Tg}}=18$, $n_{\text{HD}}=16$, $p=0.2017$), 12 weeks old (b, $n_{\text{Db Tg}}=18$, $n_{\text{HD}}=16$, $p=0.1425$), 14 weeks old (c, $n_{\text{Db Tg}}=18$, $n_{\text{HD}}=16$, $p=0.9587$), 16 weeks old (d, $n_{\text{Db Tg}}=18$, $n_{\text{HD}}=16$, $p=0.5011$), 18 weeks old (e, $n_{\text{Db Tg}}=18$, $n_{\text{HD}}=16$, $p=0.3340$), 20 weeks old (f, $n_{\text{Db Tg}}=18$, $n_{\text{HD}}=15$, $p=0.6908$), 22 weeks old (g, $n_{\text{Db Tg}}=17$, $n_{\text{HD}}=12$, $p=0.6902$) and 24 weeks old (h, $n_{\text{Db Tg}}=17$, $n_{\text{HD}}=7$, $p=0.3912$).

Supplementary figure 7



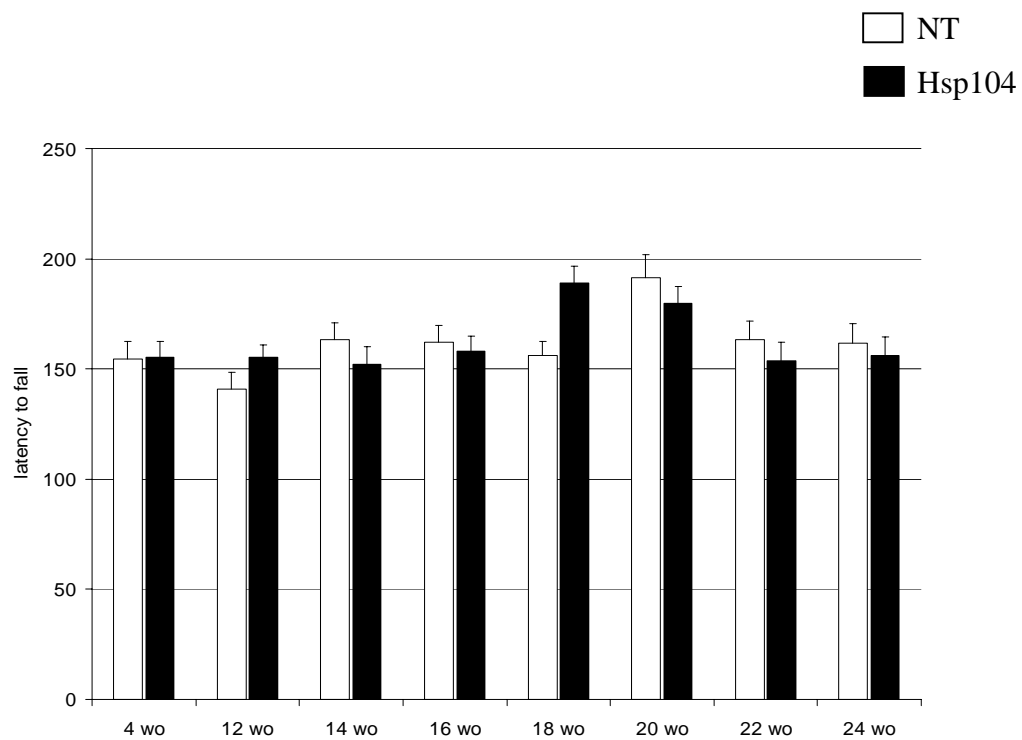
Supplementary figure 7: The expression of hsp104 protein in mouse brain has no effect of the wire manoeuvre performances of animals not expressing mutant huntingtin. Non transgenic (NT): white bars, hsp104: black bars. Analysis of wire manoeuvre strength by SHIRPA at 4 weeks old (a, $n_{NT}=18$, $n_{hsp104}=15$, $p=0.9712$), 12 weeks old (b, $n_{NT}=18$, $n_{hsp104}=15$, $p=0.4159$), 14 weeks old (c, $n_{NT}=18$, $n_{hsp104}=15$, $p=0.3566$), 16 weeks old (d, $n_{NT}=18$, $n_{hsp104}=15$, $p=0.8565$), 18 weeks old (e, $n_{NT}=18$, $n_{hsp104}=15$, $p=0.6127$), 20 weeks old (f, $n_{NT}=18$, $n_{hsp104}=15$, $p=0.4808$), 22 weeks old (g, $n_{NT}=18$, $n_{hsp104}=15$, $p=0.6001$) and 24 weeks old (h, $n_{NT}=18$, $n_{hsp104}=15$, $p=0.0963$).

Supplementary figure 8



Supplementary figure 8: The expression of hsp104 protein in HD mouse brain has no effect of the performances of the animals on an accelerating Rotarod apparatus. Double transgenic (Db Tg): white bars, HD: black bars. Analysis of Rotarod performances, the overall effect from 12 weeks old to 24 weeks old is not significant ($p=0.4732$). HD and double transgenic were not significantly different at any of the tested timepoints: 4 weeks old ($n_{\text{Db Tg}}=18$, $n_{\text{HD}}=16$, $p=0.9813$), 12 weeks old ($n_{\text{Db Tg}}=18$, $n_{\text{HD}}=16$, $p=0.5082$), 14 weeks old ($n_{\text{Db Tg}}=18$, $n_{\text{HD}}=16$, $p=0.7712$), 16 weeks old ($n_{\text{Db Tg}}=18$, $n_{\text{HD}}=16$, $p=0.5535$), 18 weeks old ($n_{\text{Db Tg}}=18$, $n_{\text{HD}}=16$, $p=0.4439$), 20 weeks old ($n_{\text{Db Tg}}=18$, $n_{\text{HD}}=15$, $p=0.6250$), 22 weeks old ($n_{\text{Db Tg}}=17$, $n_{\text{HD}}=12$, $p=0.6008$) and 24 weeks old ($n_{\text{Db Tg}}=17$, $n_{\text{HD}}=7$, $p=0.6695$). Error bars show SEM.

Supplementary figure 9



Supplementary figure 9: The expression of hsp104 protein in mouse brain has no effect of the performances of animals not expressing mutant huntingtin on an accelerating Rotarod apparatus. Non transgenic (NT): white bars, hsp104: black bars. Analysis of Rotarod performances, the overall effect from 12 weeks old to 24 weeks old is not significant ($p=0.9538$). NT ($n=18$) and hsp104 transgenic ($n=15$) were not significantly different at any of the tested timepoints: 4 weeks old ($p=0.6746$), 12 weeks old ($p=0.4395$), 14 weeks old ($p=0.6729$), 16 weeks old ($p=0.8420$), 18 weeks old ($p=0.3654$), 20 weeks old ($p=0.6746$), 22 weeks old ($p=0.7287$) and 24 weeks old ($p=0.8430$). Error bars show SEM.