

**Sup. Table 1 Determination of the habituation coefficient for control fish**

<b>Animal</b>	<b>Locomotion before the experiment (mm)</b>	<b>Locomotion 30-40 (mm)</b>	<b>Locomotion 60-70 (mm)</b>	<b>percentage of change 30-40'(mm)</b>	<b>percentage of change 60-70'(mm)</b>
CO1	3371.1	2466.4	1599.9	-26.8	-52.5
CO2	2910.1	3545.1	3617.7	21.8	24.3
CO3	2795.9	1481.9	998.0	-47.0	-64.3
CO4	2738.2	2343.2	2725.0	-14.4	-0.5
CO5	3210.1	4145.3	916.4	29.1	-71.5
CO6	2742.4	1201.0	1504.1	-56.2	-45.2
CO7	2296.4	2658.1	2183.0	15.8	-4.9
CO8	2559.6	1266.8	1437.7	-50.5	-43.8
CO9	1935.7	2431.6	2568.8	25.6	32.7
CO10	2728.4	2301.5	2363.8	-15.6	-13.4
CO11	2317.0	2676.7	2571.4	15.5	11.0
CO12	1724.1	1223.2	1417.6	-29.1	-17.8
CO13	1658.5	1714.9	732.5	3.4	-55.8
CO14	1701.5	2218.8	2075.9	30.4	22.0
CO15	3342.5	2280.1	1627.7	-31.8	-51.3
CO16	3641.7	1736.5	2838.2	-52.3	-22.1
CO17	2204.3	1762.2	1784.8	-20.1	-19.0
CO18	2140.1	2054.2	1436.1	-4.0	-32.9
CO19	3075.5	1265.6	1322.7	-58.8	-57.0
CO20	2788.4	3992.2	1208.2	43.2	-56.7
CO21	2626.3	2592.9	3224.1	-1.3	22.8
CO22	2261.8	1211.2	992.2	-46.4	-56.1
CO23	3851.4	3322.9	2790.1	-13.7	-27.6
CO24	2200.4	3532.4	2083.6	60.5	-5.3
CO25	2069.4	1065.7	1065.6	-48.5	-48.5
CO26	3140.2	3573.3	2148.0	13.8	-31.6
CO27	1519.9	2504.3	1713.9	64.8	12.8
CO28	2171.0	1574.7	2456.1	-27.5	13.1
CO29	2546.6	2770.3	2880.2	8.8	13.1
CO30	2789.0	2975.5	2359.0	6.7	-15.4
CO31	2798.6	1939.1	1932.6	-30.7	-30.9
CO32	2712.1	3562.6	1506.6	31.4	-44.4
CO33	2131.4	2358.5	1615.8	10.7	-24.2
CO34	2951.5	2669.2	2962.9	-9.6	0.4
CO35	2843.0	2381.2	2091.8	-16.2	-26.4
CO36	3238.7	3186.5	2801.4	-1.6	-13.5
CO37	1698.1	1872.6	3290.7	10.3	93.8
CO38	2628.6	3122.8	2585.2	18.8	-1.7
CO39	2329.4	2732.6	2370.8	17.3	1.8
			<b>Mean</b>	<b>-4.5</b>	<b>-17.6</b>
			<b>SEM</b>	<b>6.4</b>	<b>5.3</b>

**Sup. Table2 Example of calculations to (i) adjust the distance swum after treatment and (ii) obtain the percentage of change in activity. The value used is for animal CO1 treated with 10uM Apomorphine, for 30-40mn (cf table 3 / coeff of habituation = 0.045).**

		30-40mn		
Animal	locomotion before treatment	locomotion at 30-40 mn	locomotion at 30-40 mn adjusted with the coeff. of habituation	Percentage of change in activity
CO1 treated with 10uM Apomorphine	1560.2mm	1561.5mm	$1561.5 + (1561.5 \times 0.045) = 1631.8$	$\frac{(1631.8 - 1560.2) \times 100}{1560.2} = 4.59 \%$

**Sup. Table 3. Illustration of the different values for control-injected animals treated with 10uM Apomorphine. time window 30-40mn**

<b>Animal</b>	<b>locomotion before treatment (mm)</b>	<b>locomotion 30-40mn (mm)</b>	<b>locomotion 30-40 mn adjusted (mm)</b>	<b>30-40mn percentage of change in activity</b>
CO1	1560.20	1561.50	1631.77	4.59
CO2	3049.20	2141.40	2237.76	-26.61
CO3	1852.30	2555.30	2670.29	44.16
CO4	2289.90	45.60	47.65	-97.92
CO5	1896.90	1865.50	1949.45	2.77
CO6	3079.90	3718.70	3886.04	26.17
CO7	3182.10	3033.30	3169.80	-0.39
CO8	1661.40	1778.50	1858.53	11.87
CO9	2699.40	1471.00	1537.20	-43.05
CO10	2659.20	1083.00	1131.74	-57.44
CO11	1638.10	1890.10	1975.15	20.58
CO12	1527.00	589.00	615.51	-59.69
CO13	2748.30	1196.70	1250.55	-54.50
CO14	3677.70	1034.50	1081.05	-70.61
CO15	1545.60	1446.30	1511.38	-2.21
CO16	2808.60	1095.30	1144.59	-59.25
CO17	1771.90	274.50	286.85	-83.81
CO18	3238.50	4315.20	4509.38	39.24
CO19	3084.80	2911.20	3042.20	-1.38
CO20	3692.60	3021.60	3157.57	-14.49
CO21	3060.60	1519.40	1587.77	-48.12
CO22	3407.20	1083.50	1132.26	-66.77
CO23	3331.30	1758.40	1837.53	-44.84
CO24	3188.50	2601.20	2718.25	-14.75
			<b>Mean</b>	<b>-24.85</b>
			<b>SEM</b>	<b>7.98</b>

**Supp. Table 4 mean distance swum per fish before and after Apomorphine treatment (in mm).  
30-40/60-70 are mean adjusted distances**

		Apomorphine				
		CO				
		10µm	32.5µm	65µm	100µm	150µm
<b>Before Treatment</b>		2610.47	2437.68	2283.85	2089.18	2370.08
<b>10-20</b>		1876.82	1407.31	2705.11	1549.39	1260.81
<b>30-40</b>		1915.43	1496.05	1579.89	838.95	1335.50
<b>60-70</b>		1641.17	1534.41	1483.53	1002.24	620.60
		MO				
		10µm	32.5µm	65µm	100µm	150µm
<b>Before Treatment</b>		2388.57	2593.05	2538.86	2028.34	2104.11
<b>10-20</b>		2075.63	1970.37	3021.95	1978.25	2061.61
<b>30-40</b>		2154.38	2132.67	1762.68	1627.60	1713.11
<b>60-70</b>		1856.42	1574.93	2008.94	918.34	930.85

**Supp. Table 5 mean distance swum per fish before and after SKF38393 treatment (in mm).  
30-40/60-70 are mean adjusted distances**

		SKF38393				
		CO				
		1µm	5µm	10µm	15µm	20µm
<b>Before Treatment</b>		2318.28	2020.94	2186.46	2138.36	2466.22
<b>10-20</b>		2932.42	2298.68	2371.43	2533.18	2776.28
<b>30-40</b>		2748.29	2527.48	2600.08	2660.86	2622.77
<b>60-70</b>		2045.20	2084.12	2028.42	2394.16	2136.24
		MO				
		1µm	5µm	10µm	15µm	20µm
<b>Before Treatment</b>		2231.65	2620.37	2280.96	2541.15	2220.12
<b>10-20</b>		3135.88	2456.21	2353.52	3006.76	2565.75
<b>30-40</b>		3104.90	2892.92	2525.68	3144.78	2621.98
<b>60-70</b>		2217.04	2420.34	2006.25	2540.88	2009.64

**Supp. Table 6 mean distance swum per fish before and after Quinpirole treatment (in mm).  
30-40/60-70 are mean adjusted distances**

		Quinpirole				
		CO				
		1µm	15µm	20µm	30µm	50µm
<b>Before Treatment</b>		2211.43	2541.67	2224.69	2570.03	2158.96
<b>10-20</b>		2116.20	1758.52	1985.03	1661.22	1684.58
<b>30-40</b>		1946.53	1907.74	1764.78	1544.80	1801.86
<b>60-70</b>		1610.04	2202.59	1968.67	1735.60	1907.46
		MO				
		1µm	5µm	10µm	30µm	50µm
<b>Before Treatment</b>		2513.74	2564.45	2589.56	2410.21	2738.48
<b>10-20</b>		2654.45	2104.76	1876.04	1823.71	2212.19
<b>30-40</b>		2627.42	2217.59	2320.64	2077.48	2379.13
<b>60-70</b>		2357.20	2514.81	2612.41	2123.47	2698.29

**Supp. Table 7 mean distance swum per fish before and after Haloperidol treatment (in mm). 30-40/60-70 are mean adjusted distances**

	Haloperidol			
	CO			
	1µm	5µm	10µm	20µm
<b>Before Treatment</b>	2410.25	2435.91	1972.75	1550.12
<b>10-20</b>	2495.89	2467.85	2564.28	2119.34
<b>30-40</b>	2448.40	2711.46	2463.92	1912.19
<b>60-70</b>	2358.69	2551.24	2553.72	1875.61
	MO			
	CO			
	1µm	5µm	10µm	20µm
<b>Before Treatment</b>	2269.37	2447.74	2397.77	2531.15
<b>10-20</b>	2551.22	2561.52	3001.29	3290.56
<b>30-40</b>	2464.59	2838.81	3010.68	3355.34
<b>60-70</b>	1977.47	2389.37	2329.24	2420.04

**Supp. Table 8 mean distance swum per fish before and after SCH23390 treatment (in mm). 30-40/60-70 are mean adjusted distances**

	SCH23390				
	CO				
	1µm	5µm	10µm	20µm	30µm
<b>Before Treatment</b>	2033.54	2056.98	2457.15	2084.38	2267.33
<b>10-20</b>	2253.91	2027.65	2195.46	1874.27	1773.81
<b>30-40</b>	1885.47	1530.68	1445.52	1616.73	1568.89
<b>60-70</b>	1574.15	1222.36	1147.20	1466.90	1606.35
	MO				
	CO				
	1µm	5µm	10µm	20µm	30µm
<b>Before Treatment</b>	2273.67	2262.99	2554.83	2504.18	2273.29
<b>10-20</b>	2491.35	2249.54	2564.77	2630.29	1919.63
<b>30-40</b>	2288.06	2464.37	2436.59	2725.39	1988.86
<b>60-70</b>	1882.70	1823.63	2077.78	2397.80	2418.78

**Supp. Table 9 mean distance swum per fish before and after Eticlopride treatment (in mm). 30-40/60-70 are mean adjusted distances**

	Eticlopride			
	CO			
	1µm	5µm	10µm	20µm
<b>Before Treatment</b>	2411.23	2183.67	2146.30	2222.26
<b>10-20</b>	2467.64	2310.98	1764.25	882.39
<b>30-40</b>	2431.44	1655.12	876.17	748.65
<b>60-70</b>	2206.80	1252.31	948.60	268.54
	MO			
	CO			
	1µm	5µm	10µm	20µm
<b>Before Treatment</b>	2167.93	2380.14	2473.96	2534.37
<b>10-20</b>	2564.56	2529.98	2167.21	1211.51
<b>30-40</b>	2859.39	2377.94	1312.30	770.01
<b>60-70</b>	2429.26	1770.22	1335.34	217.99