

**Table S5. PTP gene expression during OL differentiation in mouse mixed cortical cultures**  
Differential gene expression of PTP family members in mixed cortical culture undergoing OL differentiation

DIV8/DIV5		DIV12/DIV5		DIV15/DIV5	
Fold	Pvalue	Fold	Pvalue	Fold	Pvalue
Mtmar12	-4.99	0.036	Mtmar11	-7.41	0.054
Cdc25c	-3.75	0.070	Dusp4	-4.64	0.016
Ptpn23	-3.33	0.022	Dusp2	-4.18	0.004
Ptpn14	-2.11	0.026	Cdc25c	-4.09	0.032
Ptpn6	-2.00	ND	Ptpn6	-3.36	ND
Dusp4	-1.95	0.104	Ptpn5	-3.29	0.010
Dusp1	-1.75	0.018	Ptprz1	-3.00	0.015
Ptprk	-1.57	0.045	Ptpro	-2.85	0.008
Ssh1	-1.40	0.188	Ptpn13	-2.59	0.018
Ptpro	-1.28	0.147	Mtmar12	-2.53	0.093
Tns1	-1.25	0.206	Tenc1	-2.49	0.028
Ptprm	-1.19	0.222	Ptprd	-2.43	0.013
Ptpn5	-1.12	0.306	Ptpn9	-2.26	0.040
Dusp8	-1.11	0.374	Dusp8	-2.26	0.016
Dusp12	-1.11	0.228	Mtmar6	-2.24	0.023
Mtmar2	-1.09	0.278	Ptpn12	-2.11	0.024
Cdc25a	-1.09	0.303	Dusp18	-2.07	0.011
Sbf2	-1.08	0.225	Rngtt	-2.00	0.049
Ptprz1	-1.07	0.312	Mtmar2	-1.93	0.059
Ptpn4	-1.07	0.330	Dusp12	-1.90	0.040
Ssh2	-1.05	0.439	Ptpn22	-1.81	0.025
Ptpn9	-1.03	0.447	Ssh1	-1.79	0.134
Ptpn12	-1.02	0.433	Cdc25a	-1.65	0.071
Cdc25b	1.02	0.307	Dusp6	-1.62	0.042
Dusp16	1.02	0.436	Mtmar4	-1.59	0.084
Mtmar1	1.03	0.250	Ssh2	-1.56	0.012
Ptpn1	1.05	0.193	Sbf2	-1.55	0.080
Dusp2	1.06	0.314	Ptpn1	-1.43	0.013
Rngtt	1.08	0.433	Ptpn11	-1.31	0.120
Dusp18	1.09	0.251	Acp1	-1.31	0.080
Ptp4a2	1.11	0.192	Ptprk	-1.31	0.156
Dusp22	1.11	0.310	Ptp4a1	-1.27	0.110
Mtmar6	1.12	0.330	Styx	-1.26	0.016
Ptprh	1.16	0.104	Ptprh	-1.24	0.405
Cdc14b	1.17	0.323	Ptprm	-1.23	0.084
Dusp10	1.19	0.274	Dusp11	-1.22	0.021
Ptpmt1	1.19	0.079	Cdkn3	-1.19	0.230
Acp1	1.20	0.283	Ptpn23	-1.15	0.247
Ptprs	1.23	0.244	Ptp4a2	-1.06	0.319
Ptpra	1.24	0.198	Dusp22	-1.05	0.450
Ptprr	1.27	0.149	Mtmar9	-1.05	0.398
Dusp11	1.28	0.030	Ptpn21	-1.05	0.365
Mtmar9	1.29	0.183	Cdc14a	-1.01	0.482
Styx	1.29	0.077	Ptpra	-1.00	0.496
Ptprj	1.29	0.160	Ptprs	1.03	0.498
Ptprd	1.30	0.238	Mtm1	1.04	0.436
Mtmar4	1.33	0.007	Ptpn20	1.05	0.404
Ptpn21	1.35	0.104	Mtmar3	1.06	0.417
Ptpn11	1.37	0.194	Ptprj	1.07	0.375

<b>Ptpn20</b>	1.47	0.142	<b>Dusp1</b>	1.09	0.137	<b>Mtmr12</b>	1.36	0.010
<b>Mtmr3</b>	1.47	0.040	<b>Pten</b>	1.20	0.105	<b>Ptpn11</b>	1.39	0.076
<b>Dusp7</b>	1.48	0.094	<b>Ptp4a3</b>	1.22	0.307	<b>Ptpn2</b>	1.52	0.160
<b>Mtmr11</b>	1.49	0.053	<b>Tns1</b>	1.22	0.073	<b>Ptp4a3</b>	1.59	0.131
<b>Ptprg</b>	1.52	0.088	<b>Ptprg</b>	1.23	0.258	<b>Ptprk</b>	1.65	0.346
<b>Dusp6</b>	1.52	0.031	<b>Dusp7</b>	1.24	0.148	<b>Ptpmt1</b>	1.66	0.002
<b>Ptpn18</b>	1.55	0.011	<b>Ptpn4</b>	1.28	0.148	<b>Tenc1</b>	1.66	0.147
<b>Dusp23</b>	1.55	0.117	<b>Ptprf</b>	1.28	0.200	<b>Mtmr2</b>	1.66	0.175
<b>Pten</b>	1.62	0.019	<b>Mtmr1</b>	1.31	0.072	<b>Mtmr1</b>	1.77	0.041
<b>Dusp3</b>	1.63	0.091	<b>Dusp16</b>	1.34	0.047	<b>Sbf1</b>	1.88	0.002
<b>Ptpn22</b>	1.67	0.003	<b>Sbf1</b>	1.35	0.123	<b>Dusp6</b>	2.08	0.195
<b>Cdkn3</b>	1.69	0.076	<b>Dusp10</b>	1.40	0.139	<b>Dusp16</b>	2.10	0.017
<b>Ptp4a3</b>	1.69	0.028	<b>Ptpdc1</b>	1.42	0.132	<b>Ptpn14</b>	2.33	0.007
<b>Ptp4a1</b>	1.77	0.042	<b>Ptprt</b>	1.42	0.010	<b>Ptprt</b>	2.50	0.007
<b>Cdc14a</b>	1.77	0.023	<b>Ptpn18</b>	1.50	0.114	<b>Dusp23</b>	2.52	0.055
<b>Ptpn2</b>	1.84	0.167	<b>Ptprr</b>	1.52	0.089	<b>Mtmr7</b>	2.55	0.020
<b>Ptpre</b>	1.89	0.023	<b>Ptpmt1</b>	1.59	0.000	<b>Mtmr11</b>	2.85	0.004
<b>Sbf1</b>	1.97	0.066	<b>Ptpn2</b>	1.89	0.193	<b>Ptprr</b>	2.91	0.036
<b>Dusp26</b>	1.97	0.040	<b>Dusp26</b>	2.07	0.016	<b>Ssh3</b>	3.02	0.010
<b>Ptpn2</b>	1.99	0.041	<b>Cdc25b</b>	2.09	0.039	<b>Ptpn13</b>	3.12	0.004
<b>Ptprt</b>	2.22	0.020	<b>Ptpn14</b>	2.14	0.068	<b>Ptpn2</b>	3.32	0.138
<b>Tenc1</b>	2.38	0.084	<b>Dusp3</b>	2.17	0.017	<b>Dusp3</b>	3.37	0.003
<b>Ptpdc1</b>	2.39	0.022	<b>Mtmr7</b>	2.38	0.022	<b>Tns1</b>	3.54	0.004
<b>Ptprf</b>	2.59	0.074	<b>Ptpre</b>	2.44	0.009	<b>Dusp14</b>	3.58	0.001
<b>Ptpn13</b>	2.75	0.027	<b>Ptpn2</b>	2.46	0.043	<b>Ptpn22</b>	3.67	0.213
<b>Dusp14</b>	2.83	0.065	<b>Dusp23</b>	2.71	0.003	<b>Ptpn18</b>	3.95	0.081
<b>Mtmr7</b>	3.05	0.002	<b>Dusp14</b>	2.98	0.026	<b>Tns3</b>	4.13	0.055
<b>Tns3</b>	3.36	0.019	<b>Cdc14b</b>	3.99	0.025	<b>Cdc14b</b>	4.69	0.026
<b>Ptpn</b>	3.68	0.026	<b>Ptpn</b>	4.01	0.027	<b>Epm2a</b>	5.52	0.012
<b>Ssh3</b>	3.82	0.002	<b>Ssh3</b>	4.40	0.015	<b>Mtm1</b>	5.60	0.126
<b>Epm2a</b>	3.86	0.044	<b>Tns3</b>	4.60	0.006	<b>Ptpn</b>	6.93	0.026
<b>Mtm1</b>	3.89	0.007	<b>Dusp5</b>	4.65	0.094	<b>Dusp15</b>	7.71	0.076
<b>Dusp15</b>	4.52	0.007	<b>Dusp15</b>	5.41	0.015	<b>Dusp5</b>	11.28	0.033
<b>Dusp5</b>	9.90	0.083	<b>Epm2a</b>	10.01	0.015	<b>Dusp19</b>	ND	ND
<b>Dusp19</b>	ND	ND	<b>Dusp19</b>	ND	ND	<b>Mtmr10</b>	ND	ND
<b>Mtmr10</b>	ND	ND	<b>Mtmr10</b>	ND	ND	<b>Ptpn20</b>	ND	ND
<b>Ptpn3</b>	ND	ND	<b>Ptpn3</b>	ND	ND	<b>Ptpn3</b>	ND	ND
<b>Ptpn7</b>	ND	ND	<b>Ptpn7</b>	ND	ND	<b>Ptpn7</b>	ND	ND
<b>Ptprb</b>	ND	ND	<b>Ptprb</b>	ND	ND	<b>Ptprb</b>	ND	ND
<b>Ptprc</b>	ND	ND	<b>Ptprc</b>	ND	ND	<b>Ptprc</b>	ND	ND
<b>Ptprq</b>	ND	ND	<b>Ptprq</b>	ND	ND	<b>Ptprq</b>	ND	ND
<b>Ptprv</b>	ND	ND	<b>Ptprv</b>	ND	ND	<b>Ptprv</b>	ND	ND
<b>Styxl1</b>	ND	ND	<b>Styxl1</b>	ND	ND	<b>Styxl1</b>	ND	ND

ND: Non Determined