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## Supplementary Material

### **Dynamics of Notch signalling in the mouse oviduct and uterus during the oestrous cycle**

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		P4													
E2	r	-0.091	E2												
	p	0.727													
Notch1	r	-0.010	-0.071	Notch1											
	p	0.684	0.787												
Notch2	r	0.231	-0.146	0.749	Notch2										
	p	0.356	0.589	0.000											
Notch3	r	0.121	-0.136	0.847	0.792	Notch3									
	p	0.623	0.602	0.00	0.000										
Notch4	r	0.180	0.025	0.314	0.321	0.580	Notch4								
	p	0.460	0.925	0.178	0.180	0.007									
Dll1	r	0.060	0.221	0.177	0.189	0.246	0.448	Dll1							
	p	0.808	0.394	0.457	0.439	0.296	0.048								
Dll4	r	0.309	-0.181	-0.297	-0.036	-0.077	-0.235	-0.092	Dll4						
	p	0.197	0.486	0.204	0.884	0.747	0.318	0.701							
Jag1	r	0.457	-0.211	0.462	0.788	0.503	-0.010	0.092	0.344	Jagged1					
	p	0.049	0.418	0.040	0.000	0.024	0.967	0.701	0.138						
Jag2	r	0.154	0.027	0.667	0.654	0.770	0.552	0.527	-0.220	0.265	Jagged2				
	p	0.531	0.920	0.001	0.002	0.000	0.012	0.017	0.351	0.258					
Hes1	r	0.191	-0.099	0.815	0.790	0.837	0.207	0.029	0.119	0.648	0.568	Hes1			
	p	0.433	0.705	0.000	0.000	0.000	0.380	0.904	0.616	0.002	0.009				
Hes2	r	0.059	0.163	0.058	0.213	0.074	-0.062	-0.270	0.035	0.286	-0.135	0.292	Hes2		
	p	0.816	0.546	0.815	0.397	0.763	0.780	0.264	0.886	0.234	0.580	0.226			
Hes5	r	-0.055	-0.068	0.784	0.568	0.694	0.388	0.599	-0.256	0.395	0.610	0.501	-0.221	Hes5	
	p	0.823	0.794	0.000	0.011	0.000	0.091	0.005	0.275	0.085	0.004	0.024	0.364		
Nrarp	r	0.131	-0.123	0.690	0.767	0.887	0.617	0.218	0.036	0.534	0.611	0.753	0.336	0.473	
	p	0.603	0.649	0.001	0.000	0.000	0.004	0.369	0.882	0.019	0.005	0.000	0.173	0.041	

**Fig. S1.** Correlation between the transcription levels of Notch pathway components and effector genes, and plasma P4 and E2 concentrations in the oviduct. Significant associations in grey;  $r$  – Pearson's correlation coefficient;  $p < 0.01$ .

		P4																	
E2	r	-0.091	E2																
	p	0.727																	
Notch1	r	-0.313	-0.142	Notch1															
	p	0.237	0.613																
Notch2	r	0.618	-0.173	-0.056	Notch2														
	p	0.006	0.523	0.838															
Notch3	r	0.246	-0.345	0.008	0.604	Notch3													
	p	0.324	0.191	0.977	0.008														
Notch4	r	0.932	-0.045	-0.044	0.496	0.213	Notch4												
	p	0.00	0.874	0.877	0.043	0.396													
Dll1	r	-0.213	-0.063	0.939	-0.013	-0.248	-0.068	Dll1											
	p	0.507	0.854	0.000	0.969	0.462	0.853												
Dll4	r	-0.076	-0.094	0.549	0.543	0.404	0.125	0.447	Dll4										
	p	0.765	0.730	0.023	0.020	0.096	0.632	0.146											
Jag1	r	0.859	-0.081	-0.115	0.799	0.298	0.781	0.026	0.247	Jagged1									
	p	0.000	0.765	0.671	0.000	0.230	0.00	0.937	0.323										
Jag2	r	0.344	-0.293	0.497	0.576	0.072	0.472	0.312	0.496	0.562	Jagged2								
	p	0.149	0.255	0.050	0.012	0.778	0.056	0.324	0.036	0.015									
Hes1	r	0.015	-0.215	0.524	0.539	-0.081	0.027	0.623	0.651	0.390	0.815	Hes1							
	p	0.956	0.441	0.037	0.026	0.759	0.922	0.055	0.005	0.121	0.000								
Hes2	r	-0.208	-0.249	0.206	0.381	0.639	-0.348	-0.078	0.342	0.004	-0.001	0.221	Hes2						
	p	0.495	0.435	0.522	0.200	0.019	0.243	0.831	0.252	0.989	0.998	0.468							
Hes5	r	-0.447	0.174	-0.450	-0.720	-0.388	-0.610	-0.401	-0.498	-0.556	-0.679	-0.619	-0.547	Hes5					
	p	0.126	0.570	0.165	0.006	0.213	0.046	0.251	0.084	0.048	0.011	0.042	0.127						
Nrarp	r	0.242	-0.184	0.530	0.595	0.205	0.320	0.606	0.720	0.601	0.806	0.823	0.282	-0.585					
	p	0.319	0.480	0.029	0.007	0.400	0.195	0.037	0.000	0.006	0.000	0.000	0.328	0.036					

**Fig. S2.** Correlation between the transcription levels of Notch pathway components and effector genes, and plasma P4 and E2 concentrations in the uterus. Significant associations in grey;  $r$  – Pearson's correlation coefficient;  $p < 0.01$ .