

**Table S2. Relative expression of potential interacting genes in 5-week-old mammary glands**

Gene	TEBs versus stroma			Ducts versus stroma		
	Overall signal (mean±s.d.)	Ratio (mean±s.d.)	<i>P</i>	Overall signal (mean±s.d.)	Ratio (mean±s.d.)	<i>P</i>
<i>Adam9</i>	1053±428	0.49±0.08	<0.0005	3102±2099	0.93±0.08	NS
<i>Adam10</i>	1968±812	1.42±0.36	0.052	2793±642	2.27±0.29	<0.0005
<i>Adam10</i>	544±129	1.62±0.42	0.016	788±255	1.47±0.24	0.010
<i>Adam12</i>	806±267	0.91±0.26	NS	656±175	0.73±0.16	0.041
<i>Adam15</i>	1140±311	1.09±0.19	NS	1194±470	1.06±0.11	NS
<i>Adam17</i>	1465±419	0.92±0.16	NS	1992±405	1.04±0.14	NS
<i>Adam19</i>	1104±276	1.35±1.07	<0.0005	1257±360	1.07±0.11	NS
<i>Adam33</i>	397±95	0.70±1.23	0.020	511±64	1.01±0.06	NS
<i>Areg</i>	873±300	12.96±3.92	<0.0001	836±380	10.23±4.28	0.003
<i>Btc</i>	336±78	1.28±0.33	NS	360±62	1.35±0.28	0.045
<i>Hbegf</i>	214±28	1.09±0.06	0.028	226±31	1.03±0.06	NS
<i>Egf</i>	237±39	0.98±0.08	NS	268 ±30	0.96±0.11	NS
<i>Epgn</i>	232±42	1.15±0.20	NS	291±103	0.99±0.04	NS
<i>Ereg</i>	226±44	1.09±0.17	NS	330±47	1.05±0.12	NS
<i>Tgfa</i>	325±43	1.80±0.38	0.004	306±47	1.24±0.26	NS
<i>Nrg3</i>	227±47	1.08±0.04	0.015	240±50	1.01±0.03	NS
<i>Nrg4</i>	1761±568	0.29±0.05	0.0001	3458±995	0.58±0.06	<0.0005
<i>Tnf</i>	275±65	1.18±0.16	0.055	269±37	1.00±0.12	NS
<i>Egfr</i>	1553±623	1.09±0.31	NS	2337±662	1.29±0.37	NS
<i>ErbB4</i>	260±34	1.02±0.09	NS	276±41	1.29±0.33	NS
<i>Timp1</i>	1313±321	7.09±2.13	0.0001	815±198	1.52±0.54	NS
<i>Timp2</i>	1506±974	0.99±0.18	NS	3711±2266	1.10±0.23	NS
<i>Timp3</i>	2316±448	0.34±0.06	0.0001	4645±983	1.09±0.15	NS
<i>Timp4</i>	418±86	0.55±0.09	0.001	516±158	0.65±0.09	0.003
<i>Krt1-14</i>	681±137	2.88±0.56	<0.0005	1558±379	7.27±2.47	<0.0005
<i>Krt1-18</i>	2805±1038	37.51±9.07	<0.0001	3903±1985	33.67±12.36	<0.0005
<i>Ucp1</i>	14454±2890	0.09±0.02	<0.0001	35010±16238	0.33±0.18	0.02
<i>Hprt1</i>	1561±723	1.00±0.13	NS	3237±2038	1.04±0.06	NS

Values represent normalized arithmetic means and standard deviations obtained after converting the mean overall signal intensities  $A = 0.5[\log_2(\text{Cy}5) + \log_2(\text{Cy}3)]$  and expression ratios  $M = \log_2(\text{Cy}5/\text{Cy}3)$  for each of six independent arrays to linear values. Ratios greater than 1 represent relative enrichment in the epithelial compartment, whereas ratios less than 1 indicate stromal enrichment. *P* values for rejecting the hypothesis that the mean expression ratio = 1 were corrected to control for the false discovery rate over the entire array (Benjamini and Hochberg, 1995). Mean overall signals of less than 256 ( $A=8$ ) were difficult to distinguish from background. *Krt1-14* (keratin 14, a myoepithelial cell marker), *Krt1-18* (keratin 18, a luminal epithelial cell marker), *Ucp1* (uncoupling protein 1, an adipocyte marker) and *Hprt1* (hypoxanthine guanine phosphoribosyl transferase 1, a housekeeping gene) are included as controls. NS, not significant.