Supplementary Table 5
Multicopy X-linked gene affymetrix probe_ids and average expression values in four different germ cell populations

Ampliconic Gene Names	Probe_id	A Spermatogonia	B Spermatogonia	Pachytene Spermatocytes	Round Spermatids
Gmcl1l1	1424537_at	14	38	109	2068
EG668965	1454216_at	19	49	582	547
Ssxb	1449912_at	76	49	34	509
Fthl-17	1419540_at	319	277	15	57
Zfp161	none-assigned				
Slx	1422617_at	39	54	173	3188
Slx	1422618_x_at	49	58	188	3748
Rhox2	1420448_at	283	311	55	128
Rhox4	1419229_at*	60	38	13	7
Rhox6	1419018_at*	6	8	23	6
Rhox9	1449540_at*	34	56	23	27
4930527E24Rik	1453217_at	28	35	196	3565
4930567H17Rik	none-assigned				
MageA	1450542_s_at	152	220	37	89
Xlr3	1420357_s_at	484	392	27	81
Xlr4	1430226_at*	3	7	4	4
EG434797	1429745_at	35	24	22	225
MageB1,2,3	1422345_s_at	101	117	110	101
MageB3	1450293_at	87	86	109	103
MageB5	1453280_at	11	12	26	489
ZxdB	1460441_at*	87	78	24	18
ZxdB	1455817_x_at	146	78	19	11
Dmrtc1b	1456942_x_at*	45	39	63	22
Dmrtc1b	1432116_at*	48	67	40	55
Dmrtc1b	1453544_at	190	250	30	90
Pabpc1l2	1447725_at	91	87	12	25
Tgif2lx	1427968_at	3	20	41	791
Srsx	none-assigned				
LOC665542	none-assigned				
Pramel3	1449962_at	1031	771	63	1004
Ott	1427346_at	1255	1101	101	655
LOC207318	none-assigned				
4921511M17Rik	none-assigned				
Non-ampliconic Gene Names					
1700012L04Rik	1419187_at	2	9	41	791
LOC278181	none-assigned				
LOC245376	1460378_a_at	132	177	123	1006
1700020N15Rik	1430524_at	13	68	38	522
1700042B14Rik	1432326_at	26	34	26	430
1700003E24Rik	1437988_x_at	11	22	121	2804
1700010D01Rik	1429636_at	3	8	74	1619
MGC58426	none-assigned				
4933434C23Rik	none-assigned				
4930524N10Rik	1432433_at	1	2	17	373

(Supplementary Table 5 continued)

All probe ids with matches to X-linked multicopy genes are listed. Of the 24 gene families with probe ids, 19 exhibit at least 2X signal intensity in round spermatids as compared to pachytene spermatocytes. Cases where probe sets for the same gene family have different expression patterns (e.g. *Rhox*, *Xlr*, *MageB*, and *Dmrtc1b*) are likely due to the fact that the subset of gene family members are expressed at different levels. For example probe ids 1420357_s_at and 1430226_at both match to members of the *Xlr* family. However, the 1420357_s_at probe detects expression of *Xlr3* family members while 1430226_at detects *Xlr4* expression. Examination of the signal intensities at the different germ cell stages suggests that copy members of the *Xlr3* family reactivate post-meiosis while members of the *Xlr4* family do not. Thus *Xlr4* copy members (*Xlr4a*, *Xlr4b*, and *Xlr4c*) are either not expressed in germ cells or their expression is undetectable using probe set 1430226_at. This finding fits well with the finding that *Xlr4* is expressed in a variety of other somatic tissues (Figure 2), and is one of the exceptions of non-germ cell specific expression.

*Probe ids with <100 signal intensities in all germ cell populations are noted because they either represent poor quality probes or this subset of multicopy genes are not expressed in germ cells.