

**Supplemental Table 1**

Percent X Inactivation using the Androgen Receptor Assay (First Allele)							
Germ layer	Tissue	Subjects (age)					
		20 wk gestation	22 wk gestation	27 wk gestation	34 wk gestation	4 d	7 d
<i>Ectoderm</i>	brain (cerebrum)	59	24		28		42
	peripheral nerve						
	spinal cord		21				
	skin	81	28		39	69	82
	breast						31
<i>Mesoderm</i>	blood	63				35	30
	adrenal	87	22		15		44
	spleen	83	28			40	80
	skeletal muscle	71					47
	diaphragm			61	17		
	psoas muscle		27	57	19	55	70
	tongue		21	54	27		
	vertebrae			81	29		
	rib		31	81	19		
	cartilage					53	
	adipose	71					37
	kidney	76	21			60	61
	uterus					63	72
	ovary	84		76			56
	heart	67	38			56	75
	aorta					65	58
<i>Endoderm</i>	thymus	60	31			74	
	thyroid						
	lung	80	31		36	73	49
	urinary bladder					57	62
	vagina					58	
	liver	64	25	65		59	73
	pancreas	70	28				48
	stomach	77	26	60			37
	esophagus			76	26		
	small intestine		30	63	16	58	
	large intestine	69		76			65
	gall bladder						
	appendix						

**Supplemental Table 1 (continued)**

<b>Percent X Inactivation using the Androgen Receptor Assay (First Allele)</b>											
<b>Germ layer</b>	<b>Tissue</b>	<b>Subjects (age)</b>									
		5 wk	2y	5y	6y	8y	15y	17y	18y	25y	
<i>Ectoderm</i>	brain (cerebrum)	68	26	59		50	52	56	47	22	37
	peripheral nerve						57		65		
	spinal cord										
	skin	57	25	64	49		55		70		
	breast										
<i>Mesoderm</i>	blood	46			29						
	adrenal		43		31				58		
	spleen	46	30	34	25		62	51	64	16	42
	skeletal muscle	47			29						
	diaphragm										
	psoas muscle		18	58		75	58		58	27	
	tongue						55		78		
	vertebrae										
	rib										
	cartilage										
	adipose		24	55	31				70	19	
	kidney	66	7	56	35	75	84		76	50	
	uterus	65	22					68	58		
	ovary	45			21	80					21
	heart	45		46	41		56	65	66		32
	aorta									45	
<i>Endoderm</i>	thymus	54			29			43	79		
	thyroid										
	lung	31	20				55		80	39	
	urinary bladder										
	vagina										
	liver	36	40	73	50	88		61		23	43
	pancreas	44	10		12						
	stomach	45			42					39	
	esophagus		26								
	small intestine							62			
	large intestine	48			35	68	46		62		
	gall bladder					63					
	appendix				35						

**Supplemental Table 1 (continued)**

Percent X Inactivation using the Androgen Receptor Assay (First Allele)									
Germ layer	Tissue	Subjects (age)							
		29y	33y	36y	42y	47y	53y	61y	79y
Ectoderm	brain (cerebrum)	54	44	61	48		28	41	
	peripheral nerve	51							
	spinal cord								
	skin		55					34	54
	breast	33		62					38
Mesoderm	blood							14	35
	adrenal	51	47			69			52
	spleen	50	42	55	38	43	76	18	48
	skeletal muscle							52	
	diaphragm								67
	psoas muscle	64		58		63	36		83
	tongue								
	vertebrae								
	rib								
	cartilage								
	adipose			73					
	kidney	39		51	30	51	22	34	80
	uterus	53		46					
	ovary	57	50		54	59		75	
	heart		42	62	39	72	40	28	57
	aorta								30
Endoderm	thymus								
	thyroid					51			
	lung	61			61		56	22	68
	urinary bladder								70
	vagina								
	liver	21	48	55	28	65	32	18	85
	pancreas			40	52	51	50		67
	stomach								65
	esophagus	83							
	small intestine								
	large intestine		40						
	gall bladder								
	appendix								