

Table 3. Karyotyping analyses

Sex	Condition	Passage	number of cells counted	number of abnormal cells*	% abnormal*	TOTAL % abnormal	Count	Karyotype	comments
XY	S/L	20	10	0	0%	7%	10	40XY	
XY	S/L	20	10	1	10%		9	40XY	
XY	S/L	20	10	1	10%		1	40XY,+1	
XY	S/L	20	10	1	10%	7%	9	40XY	
XY	S/L	20	10	1	10%		1	40XY,+mar	marker of unknown origin
XY	2i/L	10	10	0	0%	0%	10/10	40XY	
XY	2i/L	10	10	0	0%		9/10	40XY	
XY	2i/L	10	10	0	0%		1/10	39X,-Y	
XY	2i/L	10	10	0	0%		9/10	40XY	
XY	2i/L	10	10	0	0%		1/10	39X,-Y	
XY	2i/L	20	20	20	100%	100%	2/20	42XY,+8,+19	
XY	2i/L	20	20	20	100%		3/20	42X,-Y,+8,+19	
XY	2i/L	20	20	20	100%		8/20	43XY,+6,+8,+19	
XY	2i/L	20	20	20	100%		2/20	42X,-Y,+6,+8,+19	
XY	2i/L	20	20	20	100%		2/20	43XY,+iso 6,+8,+19	iso = isochromosome
XY	2i/L	20	20	20	100%		1/20	44XY,+Y,+iso 6,+8,+19	iso = isochromosome
XY	2i/L	20	20	20	100%		2/20	42X,-Y,+iso 6,+8,+19	iso = isochromosome
XY	2i/L	20	20	20	100%		20/20	41X,-Y,Rb(Y.6),+6,+8	Rb(Y.6) = robertsonian translocation between the Y chromosome and chromosome 6
XY	**2i/L	20	20	20	100%		19/20	42XY,T(1F;4E2),+6,+8	T(1F;4E2) = balanced translocation between chromosomes 1 and 4, with breakpoints at band F and E
XY	2i/L	20	20	20	100%		1/20	42XY,+6,+8	
XY	2i/L	20	20	20	100%	17/20	42XY,+6,+8		
XY	2i/L	20	20	20	100%	2/20	41X,-Y,+6,+8		
XY	2i/L	20	20	20	100%	1/20	43XY,+6,+8,+19		
XY	S/L+PD	20	20	6	30%	30%	2/20	40X,-Y,+11	
XY	S/L+PD	20	20	6	30%		1/20	40X,-Y,+mar	marker of unknown origin
XY	S/L+PD	20	20	6	30%		1/20	40X,-Y,+15	
XY	S/L+PD	20	20	6	30%		1/20	40X,-Y,+mar1	marker from chromosome 1
XY	S/L+PD	20	20	6	30%		1/20	41X,-Y,+15,+mar1	marker from chromosome 1
XY	S/L+PD	20	20	6	30%	14/20	39X,-Y		
XY	S/L+CHIR	20	20	2	10%	10%	14/20	40XY	
XY	S/L+CHIR	20	20	2	10%		4/20	39X,-Y	
XY	S/L+CHIR	20	20	2	10%		1/20	40X,-Y,+mar	marker of unknown origin
XY	S/L+CHIR	20	20	2	10%		1/20	40XY,-16,+mar	marker of unknown origin. Clonal with other cell
XX	S/L	6	10	7	70%	63%	3/10	40XX	
XX	S/L	6	10	7	70%		4/10	40XX,add(13q)	p arm of chromosome 13 has additional material of unknown origin
XX	S/L	6	10	7	70%		1/10	39X,-X,add(13q)	p arm of chromosome 13 has additional material of unknown origin
XX	S/L	6	10	7	70%		1/10	39X,-X	
XX	S/L	6	10	7	70%		1/10	41X,-X,+10,+19	
XX	S/L	6	10	2	20%	20%	8/10	40XX	
XX	S/L	6	10	2	20%		1/10	39X,-X	
XX	S/L	6	10	2	20%		1/10	40X,-X,+8	
XX	S/L	6	10	10	100%	100%	10/10	41XX,+13	
XY	a2i/L	10	10	1	10%	5%	9/10	40XY	
XY	a2i/L	10	10	1	10%		1/10	41XY,+19	
XY	a2i/L	10	10	0	0%	5%	10	40XY	
XY	a2i/L	20	21	2	10%	10%	18/21	40XY	
XY	a2i/L	20	21	2	10%		1/21	39X,-Y	
XY	a2i/L	20	21	2	10%		2/21	40XY,+10,-19	
XY	a2i/L	20	20	2	10%		16/20	40XY	
XY	a2i/L	20	20	2	10%		2/20	39X,-Y	
XY	a2i/L	20	20	2	10%	1/20	41XY,+19		
XY	a2i/L	20	20	2	10%	1/20	40XY,der(1)t(1;12),-12,+mar	abnormal chromosome 1, derivative of a (1;12) translocation, marker is of unknown origin	
XY	PKCi/L	10	10	2	20%	10%	8/10	40XY	
XY	PKCi/L	10	10	2	20%		1/10	39X,-Y, dup(1,E1F)	abnormal chromosome 1 with a duplication of bands E1-F
XY	PKCi/L	10	10	2	20%		1/10	42X, iso(Yq),+8,+16	iso(Yq) = isochromosome Y (q-arm).

	Sex	Condition	Passage	number of cells counted	number of abnormal cells*	% abnormal*	TOTAL % abnormal	Count	Karyotype	comments	
	XY	PKCi/L	10	10	0	0%		10/10	40XY		
	XY	PKCi/L	20	20	12	60%	68%	8/20 9/20 2/20 1/20	40XY 40XY,dup(1,E1F) 39X,-Y,dup(1,E1F) 40XY_der(1)	abnormal chromosome 1 with a duplication of bands E1-F abnormal chromosome 1 with a duplication of bands E1-F non clonal abnormal chromosome 1, different than other E1-F duplications seen	
	XY	PKCi/L	20	20	15	75%		5/20 4/20 9/20 1/20 1/20	40XY 40XY,dup(1,E1F) 39X,-Y,dup(1,E1F) 40XY,-8,+15 38X,-Y,-3,dup(1,E1F)	abnormal chromosome 1 with a duplication of bands E1-F abnormal chromosome 1 with a duplication of bands E1-F abnormal chromosome 1 with a duplication of bands E1-F abnormal chromosome 1 with a duplication of bands E1-F	
P	XY	2i/L	x+8	20	12	60%	60%	4 3 1 1 1 1 1 2 1 1 4	39X,-Y 40X,-Y,+6 41XY,+6 41X,-Y,+6,+8 40X,-Y,+6,mar9 39X,-Y,+6,-10 41X,-Y,+11,+19 40X,iso(Y),iso(6) 40XY,iso(6) 40XY_add(7,8) 40XY	marker derived from chromosome 9 isochromosomes for both Y and 6 isochromosome 6 add(7,8) = fusion of chromosome 7 and 8.	
+))	XX	2i/L	16	20	20	100%		100%	13 2 2 2 1	41X,-X,+6,+8 42X,-X,+3,+6,+8 42X,-X,+6,+8,+14 42X,-X,+6,+8,+15 43X,-X,+3,+6,+8,+14	
matomato+)	XX	2i/L	16	20	19	95%		95%	18 1 1	41XX,+8,+mar1 42XX,+8,+16,+mar1 40XX	marker derived from chromosome 1 marker derived from chromosome 1
+EtOH	XY	S/L	15	10	0	0%		0%	9 1	40XY 39X,-Y	
+EtOH	XY	S/L	15	10	0	0%			10	40XY	
+4-OHT	XY	S/L	15	10	0	0%		0%	10	40XY	
+4-OHT	XY	S/L	15	10	0	0%			8 2	40XY 39X,-Y	

percentage of abnormal cells, we did not count -Y as abnormal if it was the only abnormality. In our experience, Y is commonly unstable regardless of culture conditions cultured in 2i/L without MEF feeder cells for 16 passages (final passage 20).

analysis of every cell line and the duration for which the cells were cultured in indicated indicates the number of cells that were counted/karyotyped.