Case: Trisomy-21_same_DNA_as_the_poor_quality_example **Folder: P036-E1-vs01-examples** Date: 05-03-2009

P036-E1-vs01 Human Telomere-3 (lot 0808) Female & male ref.: P036-E1-vs01_t03 Ver.: 5.11

No.	Label	Size	Ref. size	Size diff.	MRC size	Peak Height	Peak Width	Peak Area	Norm. Peak Area	Ref. Mean	Ref. SD	Ref. Weigh	Position p-tel	Position band	Ratio	Dist. in SD	1.0 low high
3	64 -	60.83	60.77	0.06	64	256	13.9	3566	0.860	0.851	0.487	0.41		64 nt	1.01	0.0	·
4	70 -	66.54	66.40	0.14	70	169	20.5	3469	0.837	0.740	0.199	0.87		70 nt	1.13	0.5	·|
5	76 -	72.42	72.55	-0.13	76	273	19.2	5251	1.267	1.268	0.253	1.17		76 nt	1.00	0.0	·
6	82 -	78.51	78.63	-0.12	82	205	20.9	4292	1.036	1.129	0.170	1.55		82 nt	0.92	-0.6	|·
Ctrl: Q-fragments					Mean	226	18.7	4145	1.000	0.997	0.277	1.00		(CV: **0.09**)	**1.00**		
7	6 a	84.99	85.01	-0.02	88	2905	10.6	30839	0.964	0.794	0.082	1.18		6p21.3 CpG isl.	1.21	2.1	·||
8	2 a	90.26	90.26	0.00	92	3036	10.9	33052	1.033	0.804	0.090	1.09		2q14 synt.	1.29	2.6	·|||
9	1 a	96.54	96.57	-0.03	96	2459	10.4	25629	0.801	0.869	0.143	0.74	mv36	1p36.3 CpG isl.	0.92	-0.5	|·
Ctrl: D-fragments					Mean	2800	10.6	29840	0.933	0.822	0.105	1.00		(CV: **0.15**)	**1.17**		
10	X a	100.14	100.09	0.05	100	1828	9.4	17145	0.536	0.407	0.056	0.88	111.94	Xq23	1.32	2.3	·|||
12	Y a	104.58	104.53	0.05	106	2750	11.0	30227	0.945	0.857	0.081	1.27	13.98	Yq11.21	1.10	1.1	·|
14	Y a	114.58	114.55	0.03	118	2092	11.1	23301	0.728	0.651	0.092	0.85	13.54	Yq11.21	1.12	0.8	·|
Ctrl: X- & Y-fragments (male ref.)					Mean	2223	10.5	23558	0.736	0.638	0.076	1.00		(CV: **0.10**)	**1.17**		
15	1 A	126.21	126.13	0.08	130	2343	11.4	26653	0.833	0.787	0.060	0.72	1.14	1p	1.06	0.8	·|
16	2 A	133.21	133.18	0.03	137	3764	11.5	43403	1.357	1.253	0.111	0.62	0.25	2p**	1.08	0.9	·|
17	3 A	140.94	140.92	0.02	144	2567	11.3	28993	0.906	0.959	0.080	0.66	0.34	3p**	0.94	-0.7	|·
18	4 A	149.32	149.29	0.03	151	2458	11.3	27657	0.865	0.918	0.049	1.03	0.50	4p	0.94	-1.1	|·
19	5 A	157.97	157.89	0.08	158	2248	11.5	25773	0.806	0.835	0.060	0.76	0.37	5p	0.96	-0.5	·
20	6 A	165.60	165.58	0.02	165	3348	11.7	39290	1.228	1.198	0.038	1.72	0.34	6p	1.03	0.8	·
21	7 A	171.97	172.03	-0.06	172	2289	11.9	27137	0.848	0.915	0.046	1.08	0.93	7p	0.93	-1.4	|·
22	8 A	179.24	179.18	0.06	179	2918	12.0	35160	1.099	1.116	0.046	1.33	0.40	8p	0.98	-0.4	·
23	9 A	185.86	185.81	0.05	186	2885	12.0	34567	1.081	1.029	0.069	0.82	0.84	9p	1.05	0.8	·|
24	10 A	193.29	193.19	0.10	194	2538	12.3	31274	0.978	0.989	0.049	1.11	0.48	10p	0.99	-0.2	·
25	11 B	200.62	200.51	0.11	202	2615	12.4	32437	0.861	0.878	0.050	0.96	0.20	11p**	0.98	-0.3	·
26	12 B	207.12	207.17	-0.05	208	2784	12.3	34178	0.907	0.944	0.049	1.05	0.17	12p	0.96	-0.7	·
27	13 B	217.12	217.02	0.10	218	2826	12.5	35445	0.941	0.934	0.048	1.07	19.24	"13p"	1.01	0.1	·
28	14 B	225.78	225.71	0.07	226	3254	13.0	42345	1.124	1.256	0.050	1.37	19.86	"14p"	0.89	-2.6	|·
29	15 B	233.13	233.14	-0.01	234	2419	13.1	31759	0.843	0.875	0.054	0.89	21.36	"15p"**	0.96	-0.6	·
30	16 B	240.29	240.26	0.03	242	3121	13.4	41858	1.111	1.207	0.057	1.17	0.04	16p	0.92	-1.7	|·
31	17 B	249.53	249.50	0.03	250	3066	13.8	42197	1.120	1.094	0.054	1.11	0.17	17p	1.02	0.5	·
32	18 B	256.80	256.73	0.07	258	2135	13.9	29634	0.786	0.802	0.042	1.05	0.19	18p	0.98	-0.4	·
33	19 B	264.19	264.25	-0.06	266	2274	13.8	31361	0.832	0.907	0.048	1.03	0.49	19p	0.92	-1.5	|·
34	20 B	273.04	273.08	-0.04	274	1586	14.0	22164	0.588	0.637	0.069	0.51	0.26	20p**	0.92	-0.7	|·
35	21 B	280.54	280.52	0.02	282	4211	14.4	60477	1.605	1.214	0.052	1.28	14.51	"21p"	1.32	7.5 *	·|||
36	22 B	287.41	287.45	-0.04	290	2947	14.5	42786	1.135	1.158	0.053	1.20	16.61	"22p"	0.98	-0.4	·
37	XY B	296.18	296.22	-0.04	298	2959	14.6	43208	1.147	1.095	0.126	0.48	0.52	X/Yp PAR1	1.05	0.4	·
p-arms					Mean	2763	12.7	35207	1.000	1.000	0.059	1.00		(CV: **0.09**)	**1.00**		
38	1 C	305.30	305.17	0.13	306	1896	14.7	27777	0.759	0.791	0.052	0.93	247.08	1q	0.96	-0.6	·
39	2 C	313.48	313.32	0.16	314	2926	15.3	44636	1.219	1.226	0.046	1.62	241.18	2q	0.99	-0.1	·
40	3 C	321.60	321.36	0.24	322	1757	15.2	26759	0.731	0.758	0.051	0.91	198.76	3q**	0.96	-0.5	·
41	4 C	330.02	329.81	0.21	330	4079	15.8	64452	1.761	1.613	0.139	0.71	189.26	4q	1.09	1.1	·|
42	5 C	338.05	337.81	0.24	338	1543	15.9	24477	0.669	0.700	0.046	0.93	180.60	5q**	0.96	-0.7	·
43	6 C	345.02	344.94	0.08	346	1931	15.7	30301	0.828	0.891	0.035	1.56	170.69	6q	0.93	-1.8	|·
44	7 C	353.53	353.51	0.02	354	2933	16.5	48399	1.322	1.146	0.105	0.67	158.60	7q	1.15	1.7	·||
45	8 C	360.50	360.44	0.06	362	1934	16.2	31238	0.853	0.879	0.058	0.92	144.69	8q	0.97	-0.4	·
46	9 C	369.41	369.36	0.05	370	2274	16.1	36715	1.003	1.149	0.089	0.79	139.83	9q	0.87	-1.6	|·
47	10 C	377.21	377.31	-0.10	378	2699	16.8	45321	1.238	1.199	0.066	1.11	135.05	10q	1.03	0.6	·
48	11 C	384.54	384.56	-0.02	386	1365	16.5	22566	0.616	0.649	0.042	0.95	133.60	11q	0.95	-0.8	·
49	12 D	392.86	392.86	0.00	394	1857	16.9	31313	1.018	1.144	0.055	1.27	132.24	12q	0.89	-2.3	|·
50	13 D	400.35	400.44	-0.09	402	1904	17.2	32753	1.065	1.108	0.072	0.94	112.82	13q	0.96	-0.6	·
51	14 D	409.17	409.15	0.02	410	1590	17.2	27333	0.888	0.949	0.061	0.96	105.00	14q	0.94	-1.0	|·
52	15 D	416.17	416.15	0.02	418	1812	17.4	31579	1.027	1.170	0.067	1.06	99.26	15q	0.88	-2.1	|·
53	16 D	423.21	423.31	-0.10	426	1194	17.3	20610	0.670	0.782	0.036	1.33	88.63	16q	0.86	-3.1	|·
54	17 D	431.72	431.82	-0.10	434	1580	17.5	27689	0.900	1.003	0.057	1.08	78.45	17q	0.90	-1.8	|·
55	18 D	439.11	439.27	-0.16	442	2031	18.1	36814	1.197	1.338	0.116	0.70	75.90	18q	0.89	-1.2	|·
56	19 D	447.36	447.41	-0.05	450	2341	17.9	41799	1.359	1.179	0.111	0.65	63.75	19q	1.15	1.6	·||
57	20 D	455.74	455.83	-0.09	458	844	18.2	15358	0.499	0.560	0.037	0.93	62.19	20q	0.89	-1.6	|·
58	21 D	463.43	463.47	-0.04	466	3580	18.3	65468	2.128	1.439	0.094	0.93	46.89	21q	1.48	7.3 *	·|||||
59	22 D	471.61	471.63	-0.02	474	1105	18.2	20130	0.654	0.703	0.034	1.27	49.55	22q**	0.93	-1.4	|·
60	XY D	480.80	480.75	0.05	482	988	18.5	18316	0.595	0.627	0.050	0.77	154.78	X/Yq PAR2	0.95	-0.6	|·
q-arms					Mean	2007	16.8	33557	1.000	1.000	0.066	1.00		(CV: **0.13**)	**0.97**		
Mean values			0.02			2385	14.8	34382	**1.000**	1.000	0.063	4			0.98	Total of all except	
Standard deviations			0.09		(Coef. of variance:			0.320)	0.313	0.228					0.11	Ctrl and '?' peaks	

Quality assessment	**Quality limits**	**Quality**
Mean A-group area / mean Q-frag. area	>1.00 (1.75)	7.72
Mean CpG-area / mean A-group area	>0.45 (0.70)	0.88
Mean height of first probes AB	> 450 (800)	2763
Mean height of last probes CD	> 280 (500)	2007
Ratio of mean heights AB/CD ('slope')	<2.75 (2.25)	1.38
Mean group CV of weighted ratio	<0.20 (0.15)	0.11
2 uinidentified peak areas / 52 peak areas	< (0.02)	0.00

Individual peaks having normalized area > 4.0 SD from the ref. mean and ratio <0.65 or >1.3 indicate 'abnormal' probe area.

Female & male ref.

Abn. peaks: "21p" 21q

An "*" marks: Size Diff.>0.5, Peak Height>7000, unexpected peak width, and "Dist. in SD">4.0.
Ratio group mean and coefficient of variance (CV) are weighted by the ref. weights
Labels A,B,... define normalization groups; a,b,... labeled probes do not contribute to normalization.
Mean Rox height is 341 (14 peaks). 100*CV of ROX heights for peaks above 100 nt is: 2.55

(Ctrl probes are used for quality evaluation only)