Case: del(6qter)dup(12qter)_same_as_P069-vs03 Folder: P036D-vs01-examples Date: 05-03-2009

P036D-vs01 Human Telomer MLPA Kit (lot 1007) Female & male ref.: P036D-vs01_t01 Ver.: 5.11

			Peak Data						Normalized Peak Area							
No.	Label	Size	Ref. size	Size diff.	MRC size	Height	Width	Area	Peak Area	Ref. Mean	Ref. SD	Ref. Weigh	Position p-tel	band	Ratio	Dist. in SD	1.0 low high
3	64 -	60.58	61.00	-0.42	64	255	14.5	3687	0.916	0.950	0.378	0.59		64 nt	0.96	-0.1	·
4	70 -	66.05	66.83	-0.78 *	70	183	20.1	3683	0.915	1.048	0.210	1.17		70 nt	0.87	-0.6	| ·
5	76 -	72.21	72.73	-0.52 *	76	252	20.3	5108	1.268	1.105	0.247	1.05		76 nt	1.15	0.7	· |
6	82 -	78.52	78.80	-0.28	82	192	18.9	3630	0.901	0.891	0.177	1.18		82 nt	1.01	0.1	·
Ctrl: Q-fragments					Mean	221	18.4	4027	1.000	0.998	0.253	1.00		(CV: **0.12**)	**1.00**		
7	6 a	84.90	85.15	-0.25	88	1749	10.6	18579	0.762	0.812	0.084	0.94		6p21.3 CpG isl.	0.94	-0.6	| ·
9	2 a	90.12	90.36	-0.24	92	2297	10.1	23279	0.954	0.928	0.096	0.93		2q14 synt.	1.03	0.3	·
10	1 a	96.56	96.71	-0.15	96	3588	11.3 *	40386	1.656	1.762	0.150	1.13	mv36	1p36 CpG isl.	0.94	-0.7	| ·
Ctrl: D-fragments					Mean	2545	10.7	27415	1.124	1.167	0.110	1.00		(CV: **0.05**)	**0.97**		
12	Y a	104.17	104.37	-0.20	106	1209	10.5	12692	0.520	0.534	0.054	1.10	14.10	Yq11**	0.97	-0.3	·
15	Y a	114.33	114.55	-0.22	118	1757	10.1	17680	0.725	0.758	0.095	0.90	13.54	Yq11**	0.96	-0.4	·
Ctrl: Y-fragments (male ref.)					Mean	1483	10.3	15186	0.623	0.646	0.075	1.00		(CV: **0.01**)	**0.97**		
16	1 A	125.21	125.39	-0.18	130	2473	10.5	26039	1.068	1.090	0.077	0.74	1.21	1p	0.98	-0.3	·
17	2 A	133.13	133.31	-0.18	137	1951	10.7	20937	0.858	0.946	0.061	0.81	0.25	2p	0.91	-1.4	| ·
18	3 A	140.83	140.99	-0.16	144	2298	10.5	24209	0.993	1.072	0.108	0.51	0.34	3p	0.93	-0.7	| ·
19	4 A	149.17	149.35	-0.18	151	2185	10.5	22936	0.940	0.930	0.038	1.28	0.50	4p	1.01	0.3	·
20	5 A	157.66	157.88	-0.22	158	2055	10.7	21944	0.900	0.838	0.047	0.93	0.37	5p	1.07	1.3	· |
21	6 A	165.47	165.62	-0.15	165	2650	11.0	29114	1.194	1.179	0.043	1.43	0.34	6p	1.01	0.4	·
22	7 A	172.04	172.11	-0.07	172	2291	11.0	25291	1.037	0.991	0.046	1.11	0.93	7p	1.05	1.0	·
23	8 A	178.94	179.13	-0.19	179	2658	10.8	28765	1.179	1.174	0.048	1.28	0.40	8p	1.00	0.1	·
24	9 A	185.66	185.84	-0.18	186	1835	11.1	20310	0.833	0.742	0.044	0.87	0.84	9p	1.12	2.0	· |
25	10 A	193.05	193.19	-0.14	194	2187	11.1	24355	0.999	1.038	0.048	1.11	0.48	10p	0.96	-0.8	·
26	11 B	200.43	200.54	-0.11	202	2234	11.4	25387	0.914	0.861	0.042	1.05	0.20	11p**	1.06	1.3	· |
27	12 B	207.30	207.39	-0.09	208	2334	11.5	26828	0.966	0.944	0.055	0.89	0.17	12p	1.02	0.4	·
28	13 B	216.83	217.01	-0.18	218	2421	11.4	27670	0.996	1.039	0.038	1.42	19.24	"13p"**	0.96	-1.1	·
29	14 B	225.57	225.70	-0.13	226	2895	11.6	33484	1.206	1.261	0.061	1.07	19.86	"14p"**	0.96	-0.9	·
30	15 B	233.05	233.19	-0.14	234	1883	11.9	22340	0.805	0.841	0.053	0.82	21.36	"15p"	0.96	-0.7	·
31	16 B	240.14	240.28	-0.14	242	2947	11.9	34922	1.258	1.162	0.062	0.97	0.04	16p	1.08	1.5	· |
32	17 B	249.42	249.51	-0.09	250	2462	12.2	30042	1.082	1.112	0.051	1.12	0.17	17p	0.97	-0.6	·
33	18 B	256.62	256.74	-0.12	258	1793	12.2	21795	0.785	0.811	0.047	0.89	0.19	18p	0.97	-0.5	·
34	19 B	264.32	264.36	-0.04	266	2114	12.5	26455	0.953	0.882	0.050	0.91	0.49	19p	1.08	1.4	· |
35	20 B	273.00	273.12	-0.12	274	1352	12.5	16935	0.610	0.627	0.041	0.79	0.26	20p**	0.97	-0.4	·
36	21 B	280.35	280.52	-0.17	282	2522	12.6	31737	1.143	1.182	0.059	1.03	14.51	"21p"**	0.97	-0.7	·
37	22 B	287.30	287.48	-0.18	290	2623	12.6	33101	1.192	1.134	0.060	0.99	16.61	"22p"**	1.05	1.0	· |
38	XY B	296.06	296.26	-0.20	298	2331	13.0	30291	1.091	1.145	0.061	0.97	0.52	X/Yp	0.95	-0.9	·
p-arms					Mean	2282	11.5	26299	1.000	1.000	0.054	1.00		(CV: **0.05**)	**1.00**		
39	1 C	304.92	305.13	-0.21	306	1801	13.0	23353	1.054	1.035	0.048	1.13	247.08	1q	1.02	0.4	·
40	2 C	313.04	313.25	-0.21	314	2043	13.3	27264	1.231	1.156	0.051	1.18	241.18	2q	1.06	1.5	· |
41	3 C	320.91	321.21	-0.30	322	1571	13.5	21149	0.955	0.925	0.045	1.06	198.76	3q**	1.03	0.6	·
42	4 C	330.73	331.05	-0.32	330	976	13.7	13336	0.602	0.547	0.042	0.67	191.10	4q	1.10	1.3	· |
43	5 C	337.43	337.69	-0.26	338	1523	14.0	21288	0.961	0.889	0.040	1.16	180.60	5q**	1.08	1.8	· |
44	6 C	344.78	344.92	-0.14	346	881	13.6	12018	0.542	1.043	0.059	0.92	170.69	6q	0.52	-8.5 *	||||| ·
45	7 C	353.57	353.58	-0.01	354	1193	15.6	18569	0.838	0.876	0.045	1.01	158.60	7q	0.96	-0.8	·
46	8 C	360.59	360.52	0.07	362	1740	14.4	25117	1.134	1.047	0.051	1.06	144.69	8q	1.08	1.7	· |
47	9 C	369.55	369.52	0.03	370	2043	14.8	30204	1.363	1.246	0.051	1.27	139.83	9q	1.09	2.3	· |
48	10 C	377.68	377.62	0.06	378	2266	15.1	34313	1.549	1.522	0.081	0.98	135.05	10q	1.02	0.3	·
49	11 C	384.75	384.76	-0.01	386	1180	14.5	17112	0.772	0.713	0.046	0.81	133.60	11q	1.08	1.3	· |
50	12 D	393.06	393.05	0.01	394	2294	15.4	35412	1.764	1.274	0.062	1.07	132.24	12q	1.38	7.9 *	· ||||
51	13 D	400.59	400.66	-0.07	402	1082	15.4	16666	0.830	0.885	0.054	0.86	112.82	13q	0.94	-1.0	| ·
52	14 D	409.32	409.31	0.01	410	1267	15.5	19624	0.978	1.066	0.056	0.99	105.00	14q	0.92	-1.6	| ·
53	15 D	416.31	416.31	0.00	418	1520	15.7	23902	1.191	1.248	0.049	1.33	99.26	15q	0.95	-1.2	·
54	16 D	423.42	423.48	-0.06	426	1018	15.9	16171	0.806	0.857	0.046	0.96	88.63	16q	0.94	-1.1	| ·
55	17 D	431.99	432.03	-0.04	434	1247	16.0	19952	0.994	1.057	0.040	1.38	78.45	17q	0.94	-1.6	| ·
56	18 D	439.60	439.59	0.01	442	1690	16.6	28028	1.396	1.421	0.057	1.29	75.90	18q	0.98	-0.4	·
57	19 D	447.54	447.54	0.00	450	929	16.1	14935	0.744	0.721	0.071	0.53	63.75	19q	1.03	0.3	·
58	20 D	456.15	456.10	0.05	458	733	16.6	12173	0.606	0.640	0.046	0.72	62.19	20q	0.95	-0.7	| ·
59	21 D	463.68	463.64	0.04	466	1477	17.0	25117	1.251	1.326	0.065	1.06	46.89	21q	0.94	-1.2	| ·
60	22 D	471.76	471.73	0.03	474	906	16.9	15268	0.761	0.819	0.049	0.86	49.55	22q	0.93	-1.2	| ·
61	XY D	480.83	480.90	-0.07	482	771	17.7	13633	0.679	0.686	0.049	0.72	154.78	X/Yq	0.99	-0.1	·
q-arms					Mean	1398	15.2	21070	1.000	1.000	0.052	1.00		(CV: **0.14**)	**1.00**		
Mean values				-0.10		1840	13.4	23685	**1.000**	1.000	0.053	4			1.00	Total of all except	
Standard deviations				0.10		(Coef. of variance:		0.267)	0.250	0.215					0.11	Ctrl and '?' peaks	

Quality assessment	**Quality limits**	**Quality**
Mean A-group area / mean Q-frag. area	>0.65 (1.50)	6.06
Mean CpG-area / mean A-group area	>0.40 (0.70)	1.21
Mean height of first probes AB	> 450 (800)	2282
Mean height of last probes CD	> 280 (500)	1398
Ratio of mean heights AB/CD ('slope')	<3.00 (2.50)	1.63
Mean group CV of weighted ratio	<0.20 (0.15)	0.09
4 uinidentified peak areas / 51 peak areas	< (0.02)	0.01

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: 6q 12q

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 339 (14 peaks). 100*CV of ROX heights for peaks above 100 nt is: 4.29

(Ctrl probes are used for quality evaluation only)