Case: Normal Folder: P023-vs01-examples Date: 04-03-2009

P023-vs01 DiGeorge Syndrome/VCFS MLPA Kit (lot 0604) Female & male ref.: P023-vs01-t02 Ver.: 5.11

No.	Label	Size	Ref. size	Size diff.	MRC size	Height	Width	Area	Peak Area	Ref. Mean	Ref. SD	Ref. Weigh	Position p-tel	Position band	Ratio	Dist. in SD	1.0 low high
4	64 -	61.28	61.29	-0.01	64	180	18.9	3405	0.846	0.699	0.159	0.76		64 nt	1.21	0.9	·‖
	70 -		66.88		70					0.653	0.076			70 nt			
7	76 -	72.56	72.75	-0.19	76	206	17.3	3561	0.885	1.143	0.189	1.04		76 nt	0.77	-1.4	‖·
8	82 -	78.61	78.68	-0.07	82	253	20.2	5102	1.268	1.186	0.170	1.20		82 nt	1.07	0.5	·|
Ctrl: Q-fragments					Mean	213	18.8	4023	1.000	1.009	0.173	1.00		(CV: **0.21**)	**1.00**		
10	2 A	90.39	90.35	0.04	94	2369	9.9	23524	0.947	0.954	0.084	0.84		2q14 synt.	0.99	-0.1	·
12	10 A	135.79	135.77	0.02	139	1930	9.5	18246	0.734	0.781	0.073	0.80	35.50	10p12	0.94	-0.6	|·
19	7 A	173.61	173.63	-0.02	175	1506	10.2	15286	0.615	0.583	0.041	1.05	26.9	7p15	1.05	0.8	·|
36	10 C	327.87	327.85	0.02	328	1816	10.6	19302	0.820	0.840	0.048	1.30	98.1	10q23	0.98	-0.4	·
Reference fragments					Mean	1905	10.0	19090	0.779	0.789	0.061	1.00		(CV: **0.05**)	**0.99**		
37	22 C	337.77	337.76	0.01	337	2499	11.2	27997	1.190	1.178	0.069	1.05	15.95	22q11	1.01	0.2	·
39	22 C	352.31	352.36	-0.05	355	2266	11.1	25218	1.071	1.010	0.065	0.95	16.61	22q11	1.06	0.9	·|
22q most CES					Mean	2383	11.2	26608	1.130	1.094	0.067	1.00		(CV: **0.03**)	**1.03**		
16	22 A	155.80	155.80	0.00	157	2188	9.9	21755	0.876	0.838	0.040	1.27	17.74	22q11	1.04	0.9	·
21	22 A	192.37	192.36	0.01	193	2176	10.3	22520	0.906	0.853	0.056	0.91	17.9	22q11	1.06	0.9	·|
26	22 B	237.69	237.70	-0.01	238	1997	10.6	21076	1.040	0.919	0.074	0.75	18.3	22q11	1.13	1.6	·|
31	22 B	281.10	281.15	-0.05	283	1630	10.7	17387	0.858	0.857	0.042	1.23	19.1	22q11	1.00	0.0	·
35	22 C	317.66	317.69	-0.03	319	1354	12.1	16341	0.694	0.653	0.040	0.98	19.2	22q11	1.06	1.0	·|
41	22 C	371.51	371.62	-0.11	373	2390	12.1	29009	1.233	1.188	0.070	1.03	19.6	22q11	1.04	0.6	·
46	22 D	416.72	416.77	-0.05	418	1842	12.0	22116	1.248	1.222	0.089	0.83	19.7	22q11	1.02	0.3	·
22q most DGS					Mean	1940	11.1	21458	0.979	0.933	0.059	1.00		(CV: **0.04**)	**1.05**		
33	22 B	299.91	299.87	0.04	301	2248	10.4	23303	1.150	1.091	0.079	0.86	22.6	22q11	1.05	0.7	·|
49	22 D	443.96	443.89	0.07	445	2351	12.0	28174	1.590	1.622	0.088	1.14	49.35	22q13	0.98	-0.4	·
22q after DGS					Mean	2300	11.2	25739	1.370	1.357	0.084	1.00		(CV: **0.05**)	**1.01**		
14	4 A	144.32	144.30	0.02	148	4065	9.6	39135	1.575	1.586	0.072	1.16	185.9	4q34	0.99	-0.1	·
18	4 A	165.61	165.67	-0.06	166	2528	9.9	25041	1.008	0.968	0.062	0.82	183.8	4q35	1.04	0.6	·
20	4 A	181.84	181.87	-0.03	184	2813	10.0	28020	1.128	1.187	0.062	1.02	187.54	4q34	0.95	-1.0	·
4q34.2					Mean	3135	9.8	30732	1.237	1.247	0.065	1.00		(CV: **0.04**)	**0.99**		
23	10 A	208.74	208.71	0.03	211	2177	10.5	22820	0.918	0.913	0.058	0.91	1.45	10p15	1.01	0.1	·
25	10 B	228.00	227.99	0.01	229	1704	10.5	17888	0.883	0.939	0.049	1.11	7.3	10p15	0.94	-1.1	|·
27	10 B	245.73	245.75	-0.02	247	1828	10.9	19958	0.985	0.969	0.059	0.96	7.7	10p15	1.02	0.3	·
29	10 B	263.53	263.52	0.01	265	1756	10.7	18791	0.927	0.949	0.059	0.93	8.1	10p15	0.98	-0.4	·
38	10 C	345.66	345.66	0.00	346	1941	11.4	22200	0.943	0.895	0.052	1.00	10.5	10p15	1.05	0.9	·|
40	10 C	363.92	363.95	-0.03	364	1419	11.5	16260	0.691	0.746	0.046	0.95	11.0	10p14	0.93	-1.2	|·
42	10 C	381.44	381.50	-0.06	382	2374	11.5	27184	1.155	1.138	0.055	1.20	11.3	10p14	1.02	0.3	·
44	10 D	398.17	398.22	-0.05	400	1503	11.8	17739	1.001	1.096	0.067	0.94	12.1	10p14	0.91	-1.4	|·
10p14-15					Mean	1838	11.1	20355	0.938	0.956	0.055	1.00		(CV: **0.05**)	**0.98**		
30	8 B	272.94	272.94	0.00	274	1285	10.3	13272	0.655	0.628	0.045	1.06	11.6	8p23	1.04	0.6	·
47	8 D	424.22	424.23	-0.01	427	1216	12.8	15519	0.876	0.903	0.078	0.88	10.1	8p23	0.97	-0.3	·
50	8 D	453.06	453.00	0.06	454	1115	12.3	13746	0.776	0.786	0.061	0.99	19.44	8p21	0.99	-0.2	·
52	8 D	468.91	468.81	0.10	472	855	12.9	11065	0.624	0.630	0.045	1.06	9.0	8p23	0.99	-0.1	·
53	8 D	478.50	478.41	0.09	481	1189	12.6	14950	0.844	0.850	0.064	1.02	8.7	8p23	0.99	-0.1	·
8p23					Mean	1132	12.2	13710	0.755	0.760	0.059	1.00		(CV: **0.03**)	**1.00**		
28	18 B	255.16	255.12	0.04	256	2607	10.4	27139	1.339	1.358	0.061	1.25	59.0	18q21	0.99	-0.3	·
32	18 B	289.42	289.41	0.01	292	1371	10.9	14889	0.735	0.800	0.060	0.75	59.6	18q21	0.92	-1.1	|·
18q21.33					Mean	1989	10.6	21014	1.037	1.079	0.061	1.00		(CV: **0.05**)	**0.96**		
43	17 C	390.51	390.58	-0.07	391	1709	11.3	19326	0.821	0.822	0.045	1.31	1.29	17p13	1.00	0.0	·
45	17 D	407.60	407.62	-0.02	409	1262	11.9	15018	0.847	0.803	0.074	0.77	0.59	17p13	1.06	0.6	·|
48	17 D	434.25	434.18	0.07	436	1608	12.6	20220	1.141	1.080	0.071	1.08	4.8	17p13	1.06	0.9	·|
51	17 D	460.32	460.27	0.05	463	1533	12.1	18576	1.048	1.009	0.085	0.84	7.5	17p13	1.04	0.5	·
17p13					Mean	1528	12.0	18285	0.964	0.929	0.069	1.00		(CV: **0.03**)	**1.03**		
22	4 A	201.16	201.14	0.02	202	3199	10.0	31977	1.287	1.338	0.062	1.00	89.4	4q22	0.96	-0.8	·
24	4 B	218.16	218.14	0.02	220	2759	10.4	28807	1.422	1.488	0.061	1.12	96.4	4q22	0.96	-1.1	·
34	4 C	308.21	308.17	0.04	310	2999	10.8	32398	1.377	1.529	0.080	0.88	103.8	4q24	0.90	-1.9	|·
4q21-25					Mean	2986	10.4	31061	1.362	1.452	0.068	1.00		(CV: **0.03**)	**0.94**		
Mean values				0.00		1984	11.1	21580	**0.999**	1.000	0.062	**2**			1.00	Total of all except	
Standard deviations				0.05		(Coef. of variance:		0.283)	0.250	0.262					0.05	Ctrl and '?' peaks	

Quality assessment	**Quality limits**	**Quality**
Mean A-group area / mean Q-frag. area	>0.65 (1.50)	6.18
Mean height of first probes AB	> 450 (800)	2207
Mean height of last probes CD	> 280 (500)	1762
Ratio of mean heights AB/CD ('slope')	<3.00 (2.50)	1.25
Mean group CV of weighted ratio	<0.20 (0.15)	0.04
4 uinidentified peak areas / 40 peak areas	< (0.02)	0.01

Weighted mean ratios are tested for being outside ratio 1±0.13
One-tailed significance is high for p<=1%, and low for p<=5%.
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.

Normal probes

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 177 (15 peaks). 100*CV of ROX heights for peaks above 100 nt is: 9.20

(Ctrl probes are used for quality evaluation only)