

QuantumDye Full Dataset

Primer	Competitor T (Control)		QuantumDye		Competitor A		Competitor P	
	Trace Score	Contiguous Read Length	Trace Score	Contiguous Read Length	Trace Score	Contiguous Read Length	Trace Score	Contiguous Read Length
F1	39	1042	41	963	42	943	45	936
F2	32	200	39	1039	37	959	39	820
F3	41	983	37	892	29	684	28	266
F4	40	976	41	972	45	941	43	969
F5	39	942	39	955	37	842	36	791
F6	33	826	35	851	0	10	0	0
F7	32	60	43	937	21	51	32	550
F8	39	987	41	991	39	933	34	830
F9	32	159	35	976	28	44	29	786
F10	40	965	35	479	27	282	42	847
F11	42	984	46	986	42	986	44	813
F12	40	979	42	1004	34	650	38	762
F13	30	153	38	942	31	779	36	603
F14	28	181	26	319	32	103	30	660
F15	28	277	34	1019	30	304	42	949
F16	33	829	36	728	0	36	40	890
F17	36	858	43	1076	44	1019	42	933
F18	31	199	43	985	32	612	43	968
F19	28	130	39	936	30	195	36	741
F20	41	992	36	903	29	363	41	871
Average	35.20	636.10	38.90	897.65	30.45	537.30	36.00	749.25
Min	28.00	60.00	26.00	319.00	0.00	10.00	0.00	0.00
Max	42.00	1042.00	46.00	1076.00	45.00	1019.00	45.00	969.00
Median	34.50	843.50	39.00	959.00	31.50	631.00	38.50	816.50
SD	4.96	396.01	4.44	187.41	12.15	381.10	9.92	244.06
%RSD	14.09%	62.26%	11.40%	20.88%	39.90%	70.93%	27.56%	32.57%
Good results	80.00%	60.00%	95.00%	100.00%	55.00%	65.00%	80.00%	85.00%
OK results	20.00%	35.00%	5.00%	0.00%	35.00%	15.00%	15.00%	5.00%
Unusable Results	0.00%	5.00%	0.00%	0.00%	10.00%	20.00%	5.00%	5.00%

The full dataset provides raw performance metrics for QuantumDye and competitors, including contiguous read lengths, trace scores, and sequencing efficiency, derived from sequencing data generated using 20 distinct primer pairs across a range of target sequences. Green highlights strong performance, while red flags suboptimal results for competitors.