Supplementary Table 1. Classification and distribution of 513 *FMR1* alleles according to AGG interruption patterns, with demographic characteristics of the study populations.

Patients	Sex	Ethnicity	CGG repeat length of short allele	CGG repeat length of long allele	AGG number	AGG pattern of short allele	AGG pattern of long allele	Classification	Family history
P1	F	Turkish	29	39	2/2	9+9+9	19+9+9	Normal	No
P2	F	Syrian	22	30	1/2	9+12	9+9+10	Normal	No
P3	F	Turkish	26	29	2/2	6+9+9	9+9+9	Normal	Yes
P4	F	Turkish	30	30	2/1	9+9+10	19+10	Normal	Yes
P5	F	Turkish	30	30	2/2	9+9+10	9+9+10	Normal	No
P6	F	Turkish	29	29	2/2	9+9+9	9+9+9	Normal	No
P7	F	Turkish	29	29	2/2	9+9+9	9+9+9	Normal	No
P8	F	Turkish	29	29	2/2	9+9+9	9+9+9	Normal	No
P9	F	Turkish	19	29	1/2	9+9	9+9+9	Normal	No
P10	F	Turkish	30	30	2/0	9+9+10	30	Normal	No
P11	F	Turkish	29	30	2/1	9+9+9	19+10	Normal	Yes
P12	F	Turkish	29	30	2/2	9+9+9	9+9+10	Normal	No
P13	F	Turkish	29	34	2/0	9+9+9	34	Normal	No
P14	F	Turkish	31	31	2/2	10+9+10	10+9+10	Normal	No
P15	F	Turkish	29	30	2/1	9+9+9	19+9	Normal	No
P16	F	Turkish	29	31	2/2	9+9+9	9+11+9	Normal	Yes
P17	F	Turkish	31	33	2/2	9+11+9	13+9+9	Normal	No
P18	F	Turkish	29	37	2/2	9+9+9	17+9+9	Normal	No
P19	F	Turkish	29	29	2/2	9+9+9	9+9+9	Normal	Yes
P20	F	Turkish	29	31	2/2	9+9+9	9+11+9	Normal	Yes
P21	F	Turkish	29	31	2/2	9+9+9	9+11+9	Normal	Yes
P22	F	Turkish	5	27	0/2	5	6+9+10	Normal	No
P23	F	Turkish	30	40	2/3	9+7+12	9+9+10+9	Normal	No
P24	F	Turkish	29	34	2/1	9+9+9	23+10	Normal	Yes
P25	F	Turkish	24	31	1/1	10+13	20+10	Normal	Yes
P26	F	Turkish	41	43	3/4	9+7+13+9	9+6+6+9+9	Normal	Yes
P27	F	Turkish	32	33	2/1	11+9+10	23+9	Normal	No
P28	F	Turkish	29	29	2/1	9+9+9	16+12	Normal	Yes
P29	F	Turkish	29	29	2/2	9+9+9	9+9+9	Normal	Yes
P30	F	Turkish	10	30	0/2	10	9+9+10	Normal	Yes
P31	F	Turkish	30	30	2/2	9+9+10	9+9+10	Normal	No
P32	F	Turkish	24	29	2/0	9+6+7	29	Normal	No
P33	F	Turkish	30	30	2/2	9+9+10	9+9+10	Normal	No
P34	F	Turkish	29	44	1/1	19+9	34+9	Normal	No
P35	F	Turkish	30	42	2/2	9+9+10	22+9+9	Normal	No
P36	F	Turkish	30	32	2/0	9+9+10	32	Normal	Yes
P37	F	Turkish	29	29	2/2	9+9+9	9+9+9	Normal	Yes
P38	F	Turkish	29	33	2/2	9+9+9	13+9+9	Normal	Yes
P39	F	Turkish	29	30	2/2	9+9+9	9+9+10	Normal	No
P40	F	Turkish	29	35	2/1	9+9+9	15+19	Normal	No
P41	F	Turkish	30	30	2/2	9+9+10	9+9+10	Normal	Yes
P42	F	Turkish	20	30	1/2	9+10	9+9+10	Normal	No
P43	F	Turkish	31	32	2/2	9+10+10	10+11+9	Normal	Yes
P44	F	Turkish	23	30	1/2	9+13	9+9+10	Normal	Yes
P45	F	Turkish	13	29	0/1	13	18+10	Normal	No
P46	F	Syrian	29	30	2/2	9+9+9	9+9+10	Normal	No
P47	F	Syrian	30	31	2/2	9+10+9	9+10+10	Normal	No
P48	F	Turkish	29	29	2/2	9+9+9	9+9+9	Normal	No
P49	F	Turkish	24	29	1/1	9+13	19+9	Normal	No
P50	F	Turkish	19	30	1/1	9+9	9+20	Normal	Yes
P51	F	Turkish	29	30	2/2	9+9+9	9+9+10	Normal	No
P52	F	Turkish	30	30	2/2	9+9+10	9+9+10	Normal	No
P53	F	Turkish	19	30	1/2	9+9	9+9+10	Normal	No
P54	F	Turkish	30	44	2/2	9+9+10	24+9+9	Normal	Yes
P55	F	Syrian	30	31	2/1	9+10+9	21+9	Normal	No
P56	F	Turkish	29	33	2/2	9+9+9	13+9+9	Normal	No
P57	F	Turkish	14	33	0/1	14	23+9	Normal	Yes
P58	F	Turkish	29	30	2/2	9+9+9	9+9+10	Normal	Yes
P59	F	Turkish	29	30	2/1	9+9+9	13+16	Normal	No
P60	F	Turkish	23	31	1/1	10+12	20+10	Normal	Yes
P61	F	Turkish	29	31	2/2	9+9+9	10+9+10	Normal	No
P62	F	Turkish	25	30	2/0	9+9+5	30	Normal	Yes
P63	F	Turkish	30	32	2/1	9+9+10	9+22	Normal	Yes
P64	F	Turkish	29	30	2/2	9+9+9	9+9+10	Normal	No
P65	F	Turkish	30	30	2/2	9+9+10	9+10+9	Normal	Yes
P66	F	Turkish	31	31	2/2	10+10+9	9+10+10	Normal	Yes
P67	F	Turkish	30	31	2/2	9+9+10	9+10+10	Normal	Yes
P68	F	Turkish	30	32	2/1	9+9+10	21+10	Normal	No
P69	F	Turkish	29	29	2/1	9+9+9	19+9	Normal	Yes
P70	F	Turkish	17	29	0/1	17	19+9	Normal	Yes
P71	F	Turkish	31	39	1/1	21+9	28+10	Normal	Yes
P72	F	Turkish	29	33	2/1	9+9+9	22+10	Normal	Yes
P73	F	Turkish	30	30	2/2	9+9+10	9+9+10	Normal	Yes
P74	F	Turkish	29	29	2/2	9+9+9	9+9+9	Normal	No
P75	F	Turkish	20	31	1/1	9+10	20+10	Normal	Yes
P76	F	Turkish	19	29	1/1	9+9	19+9	Normal	Yes
P77	F	Turkish	29	31	2/1	9+9+9	20+10	Normal	Yes
P78	F	Turkish	30	30	2/2	9+9+10	9+9+10	Normal	Yes
P79	F	Turkish	22	30	1/2	9+12	9+9+10	Normal	No
P80	F	Turkish	30	30	2/2	9+9+10	9+9+10	Normal	No
P81	F	Syrian	19	29	1/2	9+9	11+7+9	Normal	No
P82	F	Turkish	30	39	2/2	9+9+10	19+9+9	Normal	Yes
P83	F	Turkish	30	30	2/2	9+9+10	9+9+10	Normal	No
P84	F	Turkish	21	30	1/2	9+11	9+9+10	Normal	No
P85	F	Turkish	29	30	2/2	9+9+9	9+9+10	Normal	Yes
P86	F	Turkish	30	30	2/2	9+10+9	9+10+9	Normal	No
P87	F	Turkish	29	30	2/2	9+9+9	9+9+10	Normal	No
P88	F	Turkish	20	32	1/2	9+10	3+9+20	Normal	Yes
P89	F	Turkish	29	30	2/2	9+9+9	9+9+10	Normal	No
P90	F	Turkish	29	29	2/2	9+9+9	9+9+9	Normal	No
P91	F	Turkish	23	24	1/0	9+13	24	Normal	No
P92	F	Turkish	22	32	1/2	9+12	9+12+9	Normal	No
P93	F	Turkish	31	33	2/1	10+9+10	22+10	Normal	No
P94	F	Turkish	30	32	2/1	9+9+10	22+9	Normal	Yes
P95	F	Turkish	21	29	1/2	9+11	9+9+9	Normal	Yes
P96	F	Turkish	26	29	2/2	6+9+9	9+9+9	Normal	Yes
P97	F	Turkish	29	29	2/2	9+9+9	9+9+9	Normal	Yes
P98	F	Turkish	29	30	2/2	9+9+9	9+9+10	Normal	No
P99	F	Turkish	30	31	2/1	9+9+10	20+10	Normal	No
P100	F	Turkish	27	38	2/3	9+7+9	9+9+8+9	Normal	Yes
P101	F	Turkish	30	36	2/3	9+10+9	9+6+9+9	Normal	Yes
P102	F	Turkish	29	30	2/2	9+9+9	9+9+10	Normal	No
P103	F	Turkish	29	30	2/1	9+9+9	16+13	Normal	Yes
P104	F	Turkish	30	31	1/2	21+9	9+9+10	Normal	Yes
P105	F	Turkish	24	29	1/1	9+14	19+9	Normal	No
P106	F	Turkish	30	30	2/2	9+9+10	9+10+9	Normal	Yes
P107	F	Turkish	29	29	2/2	9+9+9	9+9+9	Normal	No
P108	F	Turkish	29	30	2/2	9+9+9	9+9+10	Normal	No
P109	F	Turkish	30	30	2/2	9+9+10	9+9+10	Normal	No
P110	F	Turkish	29	30	2/2	9+9+9	10+9+9	Normal	No
P111	F	Turkish	29	30	2/1	9+9+9	19+10	Normal	No
P112	F	Turkish	23	30	1/2	9+13	9+9+10	Normal	Yes
P113	F	Turkish	29	30	2/2	9+9+9	9+9+10	Normal	No
P114	F	Turkish	19	29	1/2	9+9	9+9+9	Normal	No
P115	F	Turkish	20	30	1/2	9+10	9+9+10	Normal	Yes
P116	F	Turkish	30	30	2/2	9+9+10	9+9+10	Normal	No
P117	F	Syrian	17	31	1/2	9+7	9+11+9	Normal	No
P118	F	Turkish	29	32	2/1	9+9+9	21+10	Normal	Yes
P119	F	Turkish	30	30	2/2	9+9+10	9+9+10	Normal	Yes
P120	F	Turkish	20	30	1/1	9+10	19+10	Normal	Yes
P121	F	Turkish	30	33	2/2	9+9+10	13+9+9	Normal	Yes
P122	F	Turkish	30	31	2/2	9+9+10	9+11+9	Normal	No
P123	F	Turkish	30	31	2/2	9+9+10	10+10+9	Normal	No
P124	F	Turkish	31	31	1/0	9+21	31	Normal	No
P125	F	Turkish	22	29	1/2	12+9	9+9+9	Normal	No
P126	F	Turkish	29	30	2/2	9+9+9	9+9+10	Normal	No
P127	F	Turkish	39	39	2/2	19+9+9	19+9+9	Normal	No
P128	F	Turkish	29	30	2/2	9+9+9	9+9+10	Normal	Yes
P129	F	Turkish	29	33	2/2	9+9+9	13+9+9	Normal	No
P130	F	Turkish	30	30	2/2	9+9+10	9+9+10	Normal	Yes
P131	F	Turkish	29	29	2/1	9+9+9	19+9	Normal	No
P132	F	Turkish	30	31	2/2	9+9+10	10+10+9	Normal	No
P133	F	Turkish	27	30	2/1	9+6+10	19+10	Normal	No
P134	F	Turkish	29	31	2/2	9+9+9	9+11+9	Normal	No
P135	F	Turkish	30	30	2/2	9+9+10	9+9+10	Normal	Yes
P136	F	Turkish	30	35	2/2	9+9+10	16+9+8	Normal	Yes
P137	F	Turkish	29	37	2/3	9+9+9	9+7+9+9	Normal	No
P138	F	Turkish	29	29	2/0	9+9+9	29	Normal	Yes
P139	F	Turkish	29	30	2/2	9+9+9	10+9+9	Normal	No
P140	F	Turkish	20	23	1/0	9+10	23	Normal	Yes
P141	F	Turkish	29	29	2/2	9+9+9	9+9+9	Normal	No
P142	F	Syrian	30	31	2/1	9+9+10	21+9	Normal	No
P143	F	Turkish	29	30	2/2	9+9+9	9+9+10	Normal	Yes
P144	F	Turkish	26	30	1/2	16+9	9+9+10	Normal	Yes
P145	F	Turkish	20	30	1/2	9+10	9+9+10	Normal	No
P146	F	Turkish	19	30	1/2	9+9	9+10+9	Normal	No
P147	F	Turkish	30	44	2/2	9+9+10	23+10+9	Normal	Yes
P148	F	Turkish	30	37	1/2	19+10	17+9+9	Normal	No
P149	F	Turkish	23	52	1/3	9+13	21+9+9+10	Intermediate	Yes
P150	F	Turkish	33	45	1/2	23+9	25+9+9	Intermediate	Yes
P151	F	Syrian	30	45	2/0	9+9+10	45	Intermediate	No
P152	F	Turkish	30	49	2/2	9+9+10	28+9+10	Intermediate	Yes
P153	F	Turkish	20	46	1/0	9+10	46	Intermediate	Yes
P154	F	Turkish	30	47	2/2	9+9+10	27+9+9	Intermediate	Yes
P155	F	Turkish	33	74	1/0	23+9	74	Premutation	Yes
P156	F	Turkish	23	71	1/0	9+13	71	Premutation	Yes
P157	F	Turkish	30	89	2/0	9+9+10	89	Premutation	Yes
P158	F	Turkish	24	55	1/3	14+9	25+9+9+9	Premutation	No
P159	F	Turkish	30	88	2/0	9+9+10	88	Premutation	Yes
P160	F	Turkish	32	115	2/0	9+12+9	115	Premutation	Yes
P161	F	Turkish	30	56-71	2/0	9+9+10	56-71	Premutation mosaicism	Yes
P162	F	Turkish	34	>200	2/0	9+14+9	>200	Full mutation	Yes
P163	M	Turkish	>200		0	>200		Full mutation	Yes
P164	M	Turkish	>200		0	>200		Full mutation	Yes
P165	M	Turkish	>200		0	>200		Full mutation	Yes
P166	M	Turkish	>200		0	>200		Full mutation	Yes
P167	M	Turkish	>200		0	>200		Full mutation	No
P168	M	Turkish	>200		0	>200		Full mutation	No
P169	M	Turkish	>200		0	>200		Full mutation	Yes
P170	M	Turkish	>200		0	>200		Full mutation	No
P171	M	Turkish	>200		0	>200		Full mutation	Yes
P172	M	Turkish	>200		0	>200		Full mutation	No
P173	M	Turkish	133/>200		0	133/>200		Full mutation-Premutation mosaicism	Yes
P174	M	Turkish	152/>200		0/0	152/>200		Full mutation-Premutation mosaicism	Yes
P175	M	Turkish	71		0	71		Premutation	No
P176	M	Turkish	46		2	25+10+9		Intermediate	Yes
P177	M	Turkish	48		2	27+9+10		Intermediate	No
P178	M	Turkish	53		1	43+9		Intermediate	No
P179	M	Turkish	30		2	9+10+9		Normal	Yes
P180	M	Turkish	30		2	9+9+10		Normal	No
P181	M	Syrian	32		0	32		Normal	Yes
P182	M	Turkish	43		1	33+9		Normal	Yes
P183	M	Turkish	30		2	9+9+10		Normal	No
P184	M	Turkish	30		1	19+10		Normal	No
P185	M	Syrian	29		2	9+9+9		Normal	No
P186	M	Turkish	30		2	9+9+10		Normal	No
P187	M	Turkish	29		2	9+9+9		Normal	Yes
P188	M	Turkish	30		1	20+9		Normal	No
P189	M	Syrian	25		0	25		Normal	No
P190	M	Syrian	29		2	9+9+9		Normal	No
P191	M	Syrian	37		2	17+9+9		Normal	No
P192	M	Syrian	30		1	19+10		Normal	Yes
P193	M	Turkish	30		2	9+9+10		Normal	No
P194	M	Turkish	21		1	9+11		Normal	No
P195	M	Turkish	40		3	9+9+9+10		Normal	Yes
P196	M	Turkish	30		2	9+9+10		Normal	No
P197	M	Turkish	23		1	9+13		Normal	No
P198	M	Turkish	30		2	9+9+10		Normal	No
P199	M	Turkish	26		1	16+9		Normal	No
P200	M	Syrian	30		2	9+9+10		Normal	No
P201	M	Turkish	30		2	9+9+10		Normal	No
P202	M	Turkish	29		2	9+9+9		Normal	No
P203	M	Turkish	30		2	9+9+10		Normal	No
P204	M	Turkish	30		2	9+9+10		Normal	Yes
P205	M	Turkish	30		2	9+9+10		Normal	Yes
P206	M	Turkish	30		2	9+9+10		Normal	No
P207	M	Turkish	43		2	23+9+9		Normal	No
P208	M	Turkish	20		1	9+10		Normal	No
P209	M	Turkish	29		2	9+9+9		Normal	Yes
P210	M	Turkish	31		2	9+10+10		Normal	Yes
P211	M	Turkish	34		1	23+10		Normal	Yes
P212	M	Turkish	29		2	9+9+9		Normal	Yes
P213	M	Turkish	30		2	9+9+10		Normal	Yes
P214	M	Turkish	22		0	22		Normal	Yes
P215	M	Turkish	30		2	9+9+10		Normal	No
P216	M	Turkish	29		2	9+9+9		Normal	No
P217	M	Turkish	23		1	9+13		Normal	No
P218	M	Turkish	30		2	9+9+10		Normal	No
P219	M	Turkish	30		2	9+9+10		Normal	Yes
P220	M	Turkish	40		2	20+9+9		Normal	No
P221	M	Turkish	27		0	27		Normal	Yes
P222	M	Turkish	35		2	9+14+10		Normal	No
P223	M	Turkish	30		2	9+10+9		Normal	Yes
P224	M	Turkish	30		2	9+9+10		Normal	No
P225	M	Turkish	37		3	9+7+9+9		Normal	Yes
P226	M	Turkish	30		2	9+9+10		Normal	Yes
P227	M	Turkish	29		2	9+9+9		Normal	No
P228	M	Turkish	30		2	9+9+10		Normal	No
P229	M	Turkish	32		2	9+12+9		Normal	No
P230	M	Turkish	21		1	10+10		Normal	Yes
P231	M	Turkish	33		2	13+9+9		Normal	Yes
P232	M	Turkish	30		2	9+9+10		Normal	No
P233	M	Turkish	29		2	9+9+9		Normal	No
P234	M	Turkish	32		2	11+9+10		Normal	Yes
P235	M	Turkish	30		2	9+10+9		Normal	Yes
P236	M	Syrian	40		3	9+9+9+10		Normal	No
P237	M	Turkish	29		2	9+9+9		Normal	No
P238	M	Turkish	29		2	9+9+9		Normal	Yes
P239	M	Turkish	41		3	9+9+9+11		Normal	Yes
P240	M	Turkish	24		1	9+14		Normal	Yes
P241	M	Turkish	29		2	9+9+9		Normal	Yes
P242	M	Turkish	29		1	19+9		Normal	No
P243	M	Turkish	29		1	19+9		Normal	Yes
P244	M	Turkish	43		2	23+9+9		Normal	No
P245	M	Turkish	32		2	9+12+9		Normal	No
P246	M	Turkish	33		1	22+10		Normal	No
P247	M	Syrian	39		0	39		Normal	No
P248	M	Turkish	30		1	20+9		Normal	No
P249	M	Syrian	20		1	9+10		Normal	Yes
P250	M	Turkish	37		3	10+6+9+9		Normal	Yes
P251	M	Turkish	29		2	9+9+9		Normal	No
P252	M	Turkish	30		2	9+9+10		Normal	Yes
P253	M	Syrian	29		2	9+9+9		Normal	Yes
P254	M	Syrian	30		1	20+9		Normal	No
P255	M	Turkish	31		2	9+11+9		Normal	Yes
P256	M	Turkish	34		1	23+10		Normal	No
P257	M	Syrian	30		2	9+8+11		Normal	No
P258	M	Turkish	29		2	9+9+9		Normal	No
P259	M	Turkish	29		2	9+9+9		Normal	No
P260	M	Turkish	29		2	9+9+9		Normal	No
P261	M	Turkish	29		2	9+9+9		Normal	Yes
P262	M	Turkish	29		2	9+9+9		Normal	Yes
P263	M	Turkish	30		2	9+9+10		Normal	No
P264	M	Turkish	29		2	9+9+9		Normal	Yes
P265	M	Syrian	30		2	9+9+10		Normal	No
P266	M	Turkish	30		2	9+9+10		Normal	Yes
P267	M	Turkish	30		2	9+9+10		Normal	No
P268	M	Turkish	29		2	9+9+9		Normal	No
P269	M	Turkish	29		2	9+9+9		Normal	Yes
P270	M	Turkish	29		2	9+9+9		Normal	Yes
P271	M	Turkish	29		2	9+9+9		Normal	No
P272	M	Turkish	38		1	28+9		Normal	No
P273	M	Turkish	21		0	21		Normal	Yes
P274	M	Turkish	23		1	10+12		Normal	Yes
P275	M	Turkish	30		2	9+9+10		Normal	No
P276	M	Turkish	30		2	9+9+10		Normal	No
P277	M	Turkish	32		2	9+12+9		Normal	No
P278	M	Turkish	29		2	9+9+9		Normal	Yes
P279	M	Turkish	30		2	9+9+10		Normal	Yes
P280	M	Turkish	29		2	9+9+9		Normal	Yes
P281	M	Turkish	29		2	9+9+9		Normal	No
P282	M	Turkish	30		2	9+9+10		Normal	No
P283	M	Turkish	43		1	33+9		Normal	No
P284	M	Turkish	29		2	9+9+9		Normal	Yes
P285	M	Syrian	41		2	21+9+9		Normal	No
P286	M	Syrian	40		2	20+9+9		Normal	No
P287	M	Turkish	23		1	9+13		Normal	No
P288	M	Syrian	29		2	9+9+9		Normal	Yes
P289	M	Turkish	29		2	9+9+9		Normal	No
P290	M	Turkish	29		2	9+9+9		Normal	No
P291	M	Turkish	44		2	24+9+9		Normal	No
P292	M	Turkish	30		2	9+9+10		Normal	Yes
P293	M	Turkish	31		3	9+2+7+10		Normal	No
P294	M	Syrian	23		1	9+13		Normal	No
P295	M	Turkish	30		2	9+9+10		Normal	Yes
P296	M	Turkish	30		2	9+9+10		Normal	No
P297	M	Turkish	30		2	9+9+10		Normal	Yes
P298	M	Turkish	31		2	10+9+10		Normal	No
P299	M	Turkish	29		2	9+9+9		Normal	Yes
P300	M	Turkish	20		1	9+10		Normal	Yes
P301	M	Turkish	24		0	24		Normal	No
P302	M	Syrian	29		2	9+9+9		Normal	No
P303	M	Turkish	30		2	9+9+10		Normal	Yes
P304	M	Turkish	30		2	9+9+10		Normal	No
P305	M	Turkish	30		2	9+9+10		Normal	Yes
P306	M	Turkish	30		2	9+10+9		Normal	Yes
P307	M	Turkish	30		2	9+9+10		Normal	Yes
P308	M	Syrian	38		1	27+10		Normal	Yes
P309	M	Turkish	33		2	12+9+10		Normal	No
P310	M	Turkish	29		2	9+9+9		Normal	No
P311	M	Turkish	30		2	10+9+9		Normal	No
P312	M	Turkish	29		2	9+9+9		Normal	No
P313	M	Turkish	30		2	9+9+10		Normal	Yes
P314	M	Turkish	33		0	33		Normal	No
P315	M	Turkish	29		2	9+9+9		Normal	Yes
P316	M	Turkish	29		2	9+9+9		Normal	Yes
P317	M	Turkish	29		2	9+9+9		Normal	No
P318	M	Turkish	30		2	9+9+10		Normal	No
P319	M	Turkish	23		1	10+12		Normal	No
P320	M	Turkish	23		1	13+9		Normal	Yes
P321	M	Turkish	29		2	9+9+9		Normal	No
P322	M	Turkish	29		2	9+9+9		Normal	No
P323	M	Turkish	30		2	9+9+10		Normal	No
P324	M	Turkish	31		2	9+11+9		Normal	No
P325	M	Turkish	23		1	9+13		Normal	No
P326	M	Turkish	30		2	9+9+10		Normal	Yes
P327	M	Turkish	30		2	9+9+10		Normal	No
P328	M	Turkish	26		2	6+9+9		Normal	No
P329	M	Turkish	29		0	29		Normal	Yes
P330	M	Turkish	22		1	9+12		Normal	Yes
P331	M	Turkish	30		2	9+9+10		Normal	No
P332	M	Turkish	23		1	9+13		Normal	Yes
P333	M	Turkish	30		2	9+9+10		Normal	Yes
P334	M	Turkish	29		2	9+9+9		Normal	No
P335	M	Turkish	16		0	16		Normal	Yes
P336	M	Turkish	42		3	9+10+9+11		Normal	Yes
P337	M	Turkish	30		2	9+9+10		Normal	No
P338	M	Turkish	30		2	9+9+10		Normal	No
P339	M	Turkish	29		2	9+9+9		Normal	No
P340	M	Turkish	32		2	9+12+9		Normal	No
P341	M	Syrian	30		1	19+10		Normal	No
P342	M	Turkish	42		2	21+9+10		Normal	No
P343	M	Turkish	29		1	9+19		Normal	No
P344	M	Turkish	29		2	9+9+9		Normal	No
P345	M	Turkish	30		2	9+9+10		Normal	No
P346	M	Turkish	40		2	19+9+10		Normal	Yes
P347	M	Turkish	23		1	9+13		Normal	No
P348	M	Turkish	30		2	9+9+10		Normal	No
P349	M	Turkish	33		1	22+10		Normal	No
P350	M	Turkish	42		3	12+9+9+9		Normal	No
P351	M	Turkish	35		1	24+10		Normal	No

1) In female individuals, AGG numbers are reported separately for each X chromosome and are expressed as short allele/long allele (e.g., 2/2 indicates two AGG interruptions on both alleles; 1/2 indicates one AGG interruption on short allele and two on long allele). 2) AGG interruption patterns are presented sequentially from the 5′ to the 3′ end of the FMR1 CGG repeat tract. Numbers denote uninterrupted CGG repeat lengths, and the position of each AGG interruption is indicated by a plus sign (+) (e.g., 9+9+10 = $(CGG)9AGG(CGG)_9AGG(CGG)10$).

Supplementary Table 2. FMR1 AGG interruption patterns in Turkish and Syrian populations.

AGG number	Classification	AGG patterns	Turkish cohort	Syrian cohort
0	Normal	5	1	0
		10	1	0
		13	1	0
		14	1	0
		16	1	0
		17	1	0
		21	1	0
		22	1	0
		23	1	0
		24	2	0
		25	0	1
		27	1	0
		29	3	0
		30	2	0
		31	1	0
		32	1	1
		33	1	0
		34	1	0
		39	0	1
	Intermediate	45	0	1
		46	1	0
	Premutant	56-71 Mosaic	1	0
		71	2	0
		74	1	0
		88	1	0
		89	1	0
		115	1	0
	Mutant	133/>200 Mosaic	1	0
		152/>200 Mosaic	1	0
		>200	11	0
1	Normal	9+7	0	1
		9+9	6	1
		9+10	10	1
		9+11	3	0
		9+12	3	0
		9+13	12	1
		9+14	2	0
		9+19	1	0
		9+20	1	0
		9+21	1	0
		9+22	1	0
		10+10	1	0
		10+12	3	0
		10+13	1	0
		12+9	1	0
		13+9	1	0
		13+16	1	0
		14+9	1	0
		15+19	1	0
		16+9	2	0
		16+12	1	0
		16+13	1	0
		18+10	1	0
		19+9	10	0
		19+10	7	2
		20+9	2	1
		20+10	5	0
		21+9	2	2
		21+10	2	0
		22+9	1	0
		22+10	4	0
		23+9	4	0
		23+10	3	0
		24+10	1	0
		27+10	0	1
		28+9	1	0
		28+10	1	0
		33+9	2	0
		34+9	1	0
	Intermediate	43+9	1	0
	Premutant	Na	0	0
	Mutant	Na	0	0
2	Normal	3+9+20	1	0
		6+9+9	3	0
		6+9+10	1	0
		9+6+7	1	0
		9+6+10	1	0
		9+7+9	1	0
		9+7+12	1	0
		9+8+11	0	1
		9+9+5	1	0
		9+9+9	111	6
		9+9+10	124	6
		9+10+9	10	2
		9+10+10	4	1
		9+11+9	8	1
		9+12+9	6	0
		9+14+9	1	0
		9+14+10	1	0
		10+9+9	3	0
		10+9+10	5	0
		10+10+9	3	0
		10+11+9	1	0
		11+7+9	0	1
		11+9+10	2	0
		12+9+10	1	0
		13+9+9	6	0
		16+9+8	1	0
		17+9+9	2	1
		19+9+9	4	0
		19+9+10	1	0
		20+9+9	1	1
		21+9+9	0	1
		21+9+10	1	0
		22+9+9	1	0
		23+9+9	2	0
		23+10+9	1	0
		24+9+9	2	0
	Intermediate	25+9+9	1	0
		25+10+9	1	0
		27+9+9	1	0
		27+9+10	1	0
		28+9+10	1	0
	Premutant	Na		
	Mutant	Na		
3	Normal	9+2+7+10	1	0
		9+6+9+9	1	0
		9+7+9+9	2	0
		9+7+13+9	1	0
		9+9+8+9	1	0
		9+9+9+10	1	1
		9+9+9+11	1	0
		9+9+10+9	1	0
		9+10+9+11	1	0
		10+6+9+9	1	0
		12+9+9+9	1	0
	Intermediate	21+9+9+10	1	0
	Premutant	25+9+9+9	1	0
	Mutant	Na		
4	Normal	9+6+6+9+9	1	0
	Intermediate	Na		
	Premutant	Na		
	Mutant	Na		