

Electronic supplementary material to the article

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Title: Differential DNA methylation of *IMMP2L* gene in families with maternally inherited 7q31.1 microdeletions associated with intellectual disability and developmental delay

Journal: Cytogenetic and Genome Research

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This file contains tables S1-S3.

Table S1. Primers for quantitative real-time PCR for confirmation of identified CNVs in *IMMP2L* gene

Product	Primer sequence	Product length (bp)	Genomic coordinates (hg19)
IMMP2L_ex1	F 5'-TGCGCGTGTTTATCTGAGG-3'	73	chr7:111562182-111562254
	R 5'-TAGTTAGCCAGTGGCACCAAG-3'		
IMMP2L_ex2	F 5'-CAAGGGTGGGTGAAAAGATACA-3'	111	chr7:111161381-111161491
	R 5'-TCCTTCTACTCTTGCCACACAG-3'		
IMMP2L_int2	F 5'-GAACTGAACACTGGCTCAATACAG-3'	94	chr7:111482400-111482493
	R 5'-AGCTAGAAAGGAAGGACGATGG-3'		

Table S2. Primers for targeted bisulfite massive parallel sequencing for assessment of DNA methylation in promoter of *IMMP2L* gene

Product	Primer sequence	Product length (bp)	CpG	Genomic coordinates (hg19)
IMMP2L_1_Meth	F 5'-ATTATGGAGTTTAATAAGAATATGTGAAAA-3'	402	3	chr7:110358422-110358824
	R 5'-TAAAACCACACCCAACTAAATCTAC-3'			
IMMP2L_2_Meth	F 5'-GGTTGTTAAGGATAAGAGAAAATGTTTT-3'	416	3	chr7:110364642-110365058
	R 5'-TACTCCCTCAATCTCAACCCTATC-3'			
IMMP2L_3_Meth	F 5'-TTGTTGAATAGGGAGAATAGGAAGA-3'	381	4	chr7:110482256-110482637
	R 5'-CCCCAAAAATTAAAAACACAATAAA-3'			
IMMP2L_4_Meth	F 5'-ATATGGTTTATTATAGGTAAATGTGTATTT-3'	402	3	chr7:110496540-110496946
	R 5'-CTTTATCTCCCACTCTATCTTCTAC-3'			
IMMP2L_5_Meth	F 5'-GGTGATGTATAATGAAAGTGATATTATTTT-3'	406	3	chr7:110496540-110496946
	R 5'-ACTAACTACTCCCAAACTCCCTAC-3'			
IMMP2L_6_Meth	F 5'-TGATTTTTGAGTAATAATTTAAAGATATGA-3'	354	4	chr7:110506110-110506464
	R 5'-AAATCTTCCTTCTACTTACCTCTTCC-3'			
IMMP2L_7_Meth	F 5'-TTTTTGATGATTTGAATTAGTGAGGTA-3'	478	5	chr7:110511034-110511512
	R 5'-CCAAATAACCAATCCTTTTTCTAAAC-3'			
IMMP2L_8_Meth	F 5'-GGTGAGTATTTTTGGGTGTTAGTAG-3'	340	5	chr7:110547038-110547378
	R 5'-TTCCTATTATATCCTCCTTTCAACTC-3'			
IMMP2L_9_Meth	F 5'-GATAGAGATTTTATAGTGTGGTTTTT-3'	366	3	chr7:110692862-110693228
	R 5'-ACCCTCTTCCAAATATACTTTCCTT-3'			

IMMP2L_10_Meth	F 5'-AAATGTTTTGATATAAATTAATGTAAGTAG-3'	341	7	chr7:110738546-110738887
	R 5'-CTCATACACAAAACTTATTCTTTC-3'			
IMMP2L_11_Meth	F 5'-TTTTTATTGAAGTTGATATTAATTTTT-3'	468	4	chr7:110744541-110745009
	R 5'-AACTCCCCATCTCTCTTTTTATTT-3'			
IMMP2L_12_Meth	F 5'-TGTAAGGTATAATGTAAGTTTGTTTTT-3'	310	1	chr7:110753794-110754104
	R 5'-TTCCCATTTTATCCACTCTTTATTTTC-3'			
IMMP2L_13_Meth	F 5'-GTAATTATTAATGGGAAAATAAAGATAGAT-3'	480	4	chr7:110838197-110838677
	R 5'-AAATCAAAACAAAAATTATCAAAAC-3'			
IMMP2L_14_Meth	F 5'-ATTAATTTTAGGTTTTTGTTAATTTGAATA-3'	331	3	chr7:110879179-110879510
	R 5'-CACATTTTATCTTTATCTTATCATTAATA-3'			
IMMP2L_15_Meth	F 5'-AAATTATGTGGTTATTTATTATTTGAGTAT-3'	288	2	chr7:111200900-111201188
	R 5'-CTTTAATACACTACTTCCTCTCCC-3'			
IMMP2L_16_Meth	F 5'-TTTTTGTGAGGATTGGGAGAG-3'	302	33	chr7:111202130-111202432
	R 5'-AATAATCTCTTAAACTAAAAACCCTTCC-3'			

Table S3. Primers for targeted massive parallel sequencing for assessment of pathogenic single nucleotide variations in exons of *IMMP2L* gene

Product	Primer sequence	Product length (bp)	Genomic coordinates (hg19)
IMMP2LSeq_ex1	F 5'-TTGGTGGTCTCTTGGGCTG-3'	595	chr7:111201840-111202434
	R 5'-TTCTCTCTCTCGCTCGCTCT-3'		
IMMP2LSeq_ex2	F 5'-GAGACAAGATTGCCCTTCGG-3'	351	chr7:111161264-111161614
	R 5'-AACCTTTCAGTTCCCAGAATAGGA-3'		
IMMP2LSeq_ex3	F 5'-TGTGAAGAATCCCAGTGAGCC-3'	361	chr7:111127220-111127580
	R 5'-GTGGATTACCAGTTAAATCAGCAT-3'		
IMMP2LSeq_ex4	F 5'-TGTCATGGGGTGCAAAGGAA-3'	288	chr7:110603458-110603745
	R 5'-TTGGCCCTCATGGACTTCAG-3'		
IMMP2LSeq_ex5	F 5'-TTCCTAAGTTTGTATGCCAGCA-3'	271	chr7:110526555-110526825
	R 5'-TCTTGGCTGAGTTACCTGAATAAC-3'		
IMMP2LSeq_ex6	F 5'-ACTTCTCCCTGGGATGTTAAACC-3'	908	chr7:110302980-110303887
	R 5'-GCTTGACTGTATGCAAGTGTCG-3'		