

## **SUPPLEMENTAL INFORMATION**

**A Single Point Mutation in the Gene Encoding Gb3/CD77 Synthase Causes a Rare Inherited Polyagglutination Syndrome**

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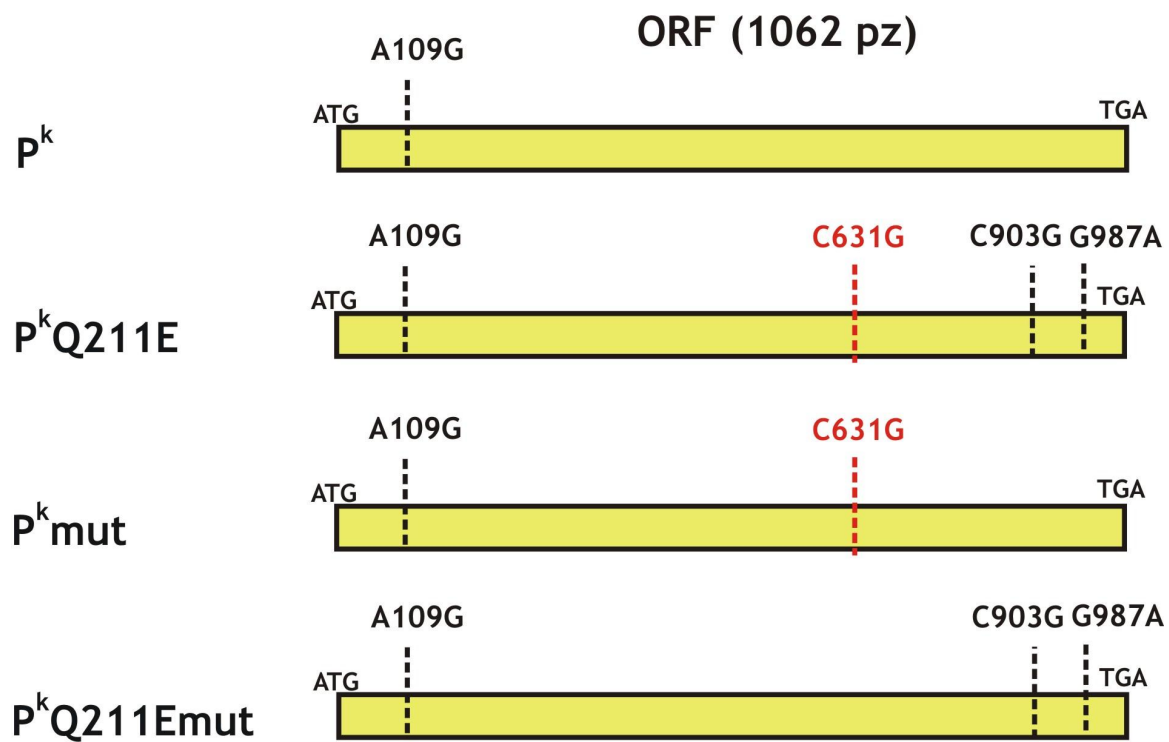
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**Table S1: Primer sequences used in the study.**

Primer	Sequence (5'>3')	Application
Pk For	GGTTCCTGCTGGAAGCTCCTGGTCT	amplification of <i>A4GALT</i> ORF
PkRev	GCTCCTCAACAGCCTGCCTAA	
PkSeqFor	TCGCACTCATGTGGAAG	sequencing of <i>A4GALT</i> ORF
PkSeqRev	AGTACATTTTCATGGCCT	
Tmvic probe	CGGGACTGGGTGCC	probes for TaqMan assay
Tmfam probe	CGGGACTCGGTGCC	
TM For	GCGGAACCTGACCAACGT	amplification for TaqMan assay
TM Rev	GCGCCGTTGAGGACGTA	
PkXho For	CCCCTCGAGGCCACCATGTCCAAGCCCCCGAC	introduction of <u>Xho</u> I restriction site
PkNot Rev	GCGGCCGCTCACAAGTACATTTTCATGGCCTC	introduction of <u>Not</u> I restriction site
PkWTmut1 For	TGCTGGGCACCCAGTCCCGCTAC	mutagenic primers that introduce the C631G mutation into cDNA encoding the consensus Gb3/CD77 synthase
PkWTmut2 For	GTAGCGGGACTGGGTGCCAGCA	
PkQ211Emut1 For	TGCTGGGCACCGAGTCCCGCTAC	mutagenic primers that introduce the G631C mutation into cDNA encoding the Gb3/CD77 Q211E synthase
PkQ211Emut2 For	GTAGCGGGACTCGGTGCCAGCA	
PCAG For	CGTGCTGGTTGTTGTGCTGTCTCA	primers complementary to the Pcac mutagenesis vector
PCAG Rev	ACAAACGCACACCGGCCTTATCC	

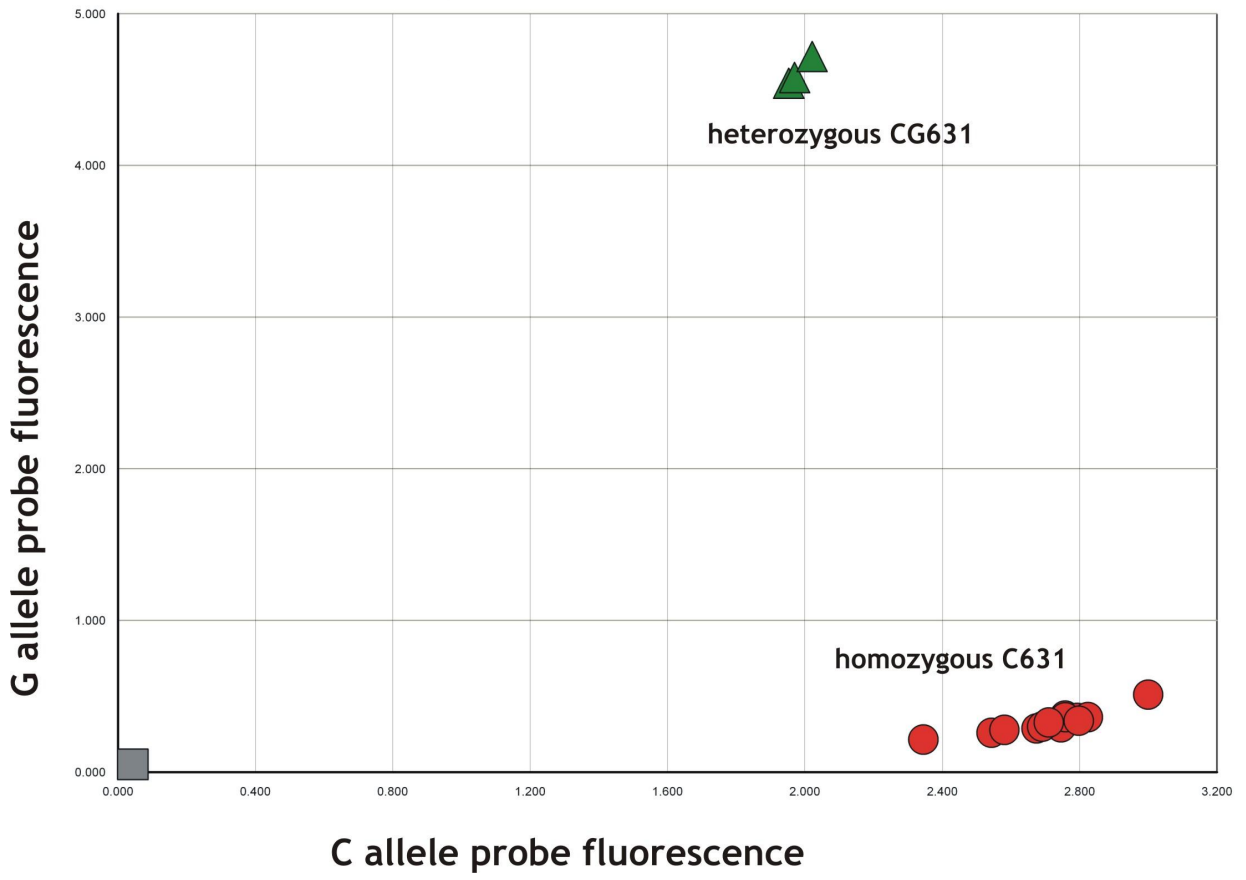
**Table S2: PCR programs used in the study.**

	Amplification of <i>A4GALT</i> ORF from genomic DNA			Preparation of expression vector			Mutagenesis I step			Mutagenesis II step		
	Temp [°C]	Time [s]	Cycle	Temp [°C]	Time [s]	Cycle	Temp [°C]	Time [s]	Cycle	Temp [°C]	Time [s]	Cycle
Initial denaturation	94	180	1	94	180	1	94	180	1	94	180	1
Denaturation	94	30	30	94	30	30	94	30	30	94	30	30
Annealing	64	30		64	30		69	30		69	30	
Extension	72	150		72	150		72	75		72	75	
Final Extension	72	600	1	72	600	1	72	600	1	72	600	1



**FIGURE S1: Schematic representation of the consensus and Q211E versions of *A4GALT* open reading frames used throughout the study.**

Allelic Discrimination



**FIGURE S2: Allelic discrimination by a TaqMan SNP genotyping assay for C631G.**