



Figure S1 Characteristics of three novel *G6PD* variants. (A) Clinical feature of patients with the other three novel *G6PD* variants. For the *G6PD* activity, the cut-off values were 2.6 (U/gHb) for males and 3.3 (U/gHb) for females. For the *G6P/6PG* ratio, the cut-off value for healthy people was 1.0–1.6. The predictive role of the c.697G>C variant was determined using the PolyPhen-2 (B) and SIFT (C) databases. Regarding the data from the SIFT database, the nonpolar, uncharged polar, basic, and acidic amino acids are marked in black, green, red, and blue, respectively.

Table 1 List of Oligonucleotide & Antibody

Primer	Sequence	Use
G6PD-QF	GCCCGAAAACACCTTCATCG	Real Time PCR
G6PD-QR	GCAAGGCCAGGTAGAAGAGG	
GAPDH-QF	CAGCGACACCCACTCCTCCACCTT	
GAPDH-QR	CATGAGGTCCACCACCCTGTTGCT	
697-F	CTCTGATCCTCACTCCCCGA	Amplify the Genome Segment of c.697G>C both for T7E1 Assay and DNA Sequencing
697-R	TCATAAAACCGTGGGGTGTCT	
Sg-1 F	cacc GTAACGCAGGCGATGTTGTCC	SgRNAs for <i>G6PD</i> Gene c.697G>C Site
Sg-1 R	aaac CGGACAACATCGCCTGCGTTA	
Sg-2 F	cacc CTTGAAGGTGAGGATAACGC	
Sg-2 R	aaac GCGTTATCCTCACCTTCAAG	
Sg-3 F	cacc CTGCGTTATCCTCACCTTCA	
Sg-3 R	aaac TGAAGGTGAGGATAACGCAG	
c.697G>C Donor	CGTGAGGACCAGATCTACCGCATCGACCACTACCTGGGCAAGGA GATGGTGCAGAACCTCATGGTGTGAGGTGGGGCCAAGCCTGG GCCGGGGACCAGGTGGGGTGGTACTCAGGAGCCTCACCT GGCCCACTGCCTCCCGAGGACGAATTCCTCCAGAACTCAGAC AAGGGTGACCCCTCACATGTGGCCCTGCACCACAGAGGCCCA AGGTCAGTTCCTCCACCTTGCCCTCCCTGCAGATTTGCCAACA GGATCTTCGGCCCCATCTGGAACCGGGACAACATCGCCTGCCTT ATCCTCACCTTCAAGGAGCCCTTTGGCACTGAGGGTCGCGGGG GCTATTTTCGATGAATTTGGGATCATCCGGTGAGAGCTTCTCTC TCCTGGGAGGCTGGCACAGGGTGGCAGAGCCAGTCACCCTGCA GGGCTACTCTCCCTATCTTGGGGAGCTCCTCCTCACCTGCA GTTCAAACCTAAGTGTCTGAGCTATCAGACCGGGCTGGAAAGG GCTGGACCCCTACACAGCCAAGCACCCACCGTTTTATGATTCA GTGATAGCATCACCATGTCTTCTCTGATTTAAG	Homology Arm for CRISPR/Cas9
Antibody	Source	Cat.No.
G6PD (D5D2) Rabbit mAb	Cell Signaling Technology	#12263
HRP-conjugated Affinipure Goat Anti-Rabbit IgG(H+L)	Proteintech	SA00001-2