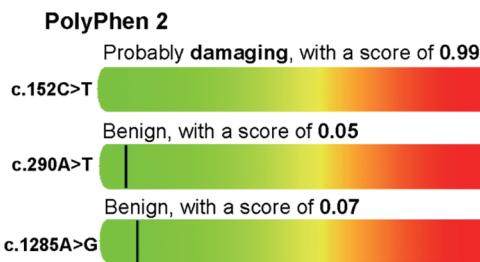


## A Characteristics of infants with other variants of G6PD

No.	Age	Gender	G6PD activity (U/gHb)	G6PD/6PGD	Mutation	Genotype
# 1	6 d	Male	1.00	0.82	c.152C>T	Hemizygous
# 2	8 d	Male	0.60	0.86	c.290A>T	Hemizygous
# 3	7 d	Male	0.99	0.79	c.290A>T	Hemizygous
# 7	10 d	Male	N.D	0.87	c.1285A>G	Hemizygous

## B



## C

**SIFT**

Mutation	Protein Sequence Change	Score	Prediction
c.152C>T	p.51Thr>Ile	0.001	Damaging
c.290A>T	p.97Lys>Ser	0.086	Toletrated
c.1285A>G	p.429Lys>Glu	0.177	Toletrated

**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	GCAAGGCCAGGTAGAACAGAGG	
GAPDH-QF	CAGCGACACCCACTCCTCACCTT	
GAPDH-QR	CATGAGGTCCACCACCCCTGTTGCT	
697-F	CTCTGATCCTCACTCCCCGA	Ampify the Genome Segment of c.697G>C both for T7EI Assay and DNA Sequencing
697-R	TCATAAAACCGTGGGGTGCT	
Sg-1 F	cacc GTAACGCAGGCGATGTTGTCC	SgRNAs for G6PD 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	CGTGAGGACCAGATCTACCGCATCGACCACACTACCTGGCAAGGA GATGGTGCAGAACCTCATGGTGTGAGGTGGGGCCAAGCCTGG GCCGGGGACCAGGGTGGGGTGGTACTCAGGAGCCTCACCT GGCCCACCTGCCTCCCCGAGGACGAATTCTCCAGAACACTCAGAC AAGGGTGACCCCTCACATGTGGCCCTGCACCACAGAGGCCCA AGGTCAAGTCCACCTTGCCCTCCCTGCAGATTGCCAACA GGATCTCGGCCCCATCTGGAACCGGGACAACATCGCCTGCCTT ATCCTCACCTCAAGGAGCCCTTGGCACTGAGGGTCGCAGGG GCTATTCGATGAATTGGGATCATCCGGTGAGAGCTCTTCCTCTC TCCTGGGAGGCTGGCACAGGGTGGCAGAGCCAGTCACCCCTGCA GGGCTACTCTCCCTATCTTGGGGAGCTCCCTCCTCACCCCTGCA GTTCAAAACCTAAGTGTCTGAGCTATCAGACCGGGCTGGAAAGG GCTGGACCCCTACACAGCCAAGCACCCCACGGTTTATGATTCA GTGATAGCATCACCATGTCCTCCTTGATTAAAG	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