Electronic Supplementary Material (ESI) for RSC Advances.

Supporting information

Improving the thermostability and modulating the inulin profile of inulosucrase through rational glycine-to-proline substitution

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Table S1 Oligonucleotide primer for site-directed mutagenesis

Primer name	Sequence (5’ - 3’)
G217P_F	GCTGCAAAGTCTCCGACACAAATG
G217P_R	CATTTGTGTCGGAGACTTTGCAGC
G298P_F	CGCAATGATGCCGATTCCAAACC
G298P_R	GGTTTGGAATCGGCATCATTGCG
G330P_F	GGTCCAATTTTTCCGTATAATTCTACCG
G330P_R	CGGTAGAATTATACGGAAAAATTGGACC
G416P_F	CTACTAACAAACCGGCCGATAATATTGC
G416P_R	GCAATATTATCGGCCGGTTTGTTAGTAG
G450P_F	GAAAATTATCAACCGGAGGACCAAATTTATAACTG
G450P_R	CAGTTATAAATTTGGTCCTCCGGTTGATAATTTTC
G624P_F	CTAATAGAAATCCGGTAGCGGGTAAAG
G624P_R	CTTTACCCGCTACCGGATTTCTATTAG
G627P_F	GGAGTAGCGCCGAAAGGAATGG
G627P_R	CCATTCCTTTCGGCGCTACTCC
G629P_F	GCTGCAAAGTCTCCGACACAAATG
G629P_R	CATTTGTGTCGGAGACTTTGCAGC
F_NdeI_InuS	GGTACATATGCTAGAACGCAAGGAACATAAAAAAATG
R_699HIS_InuS	GGTGCTCGAGTTTTAATCCATAACCAATTAAG

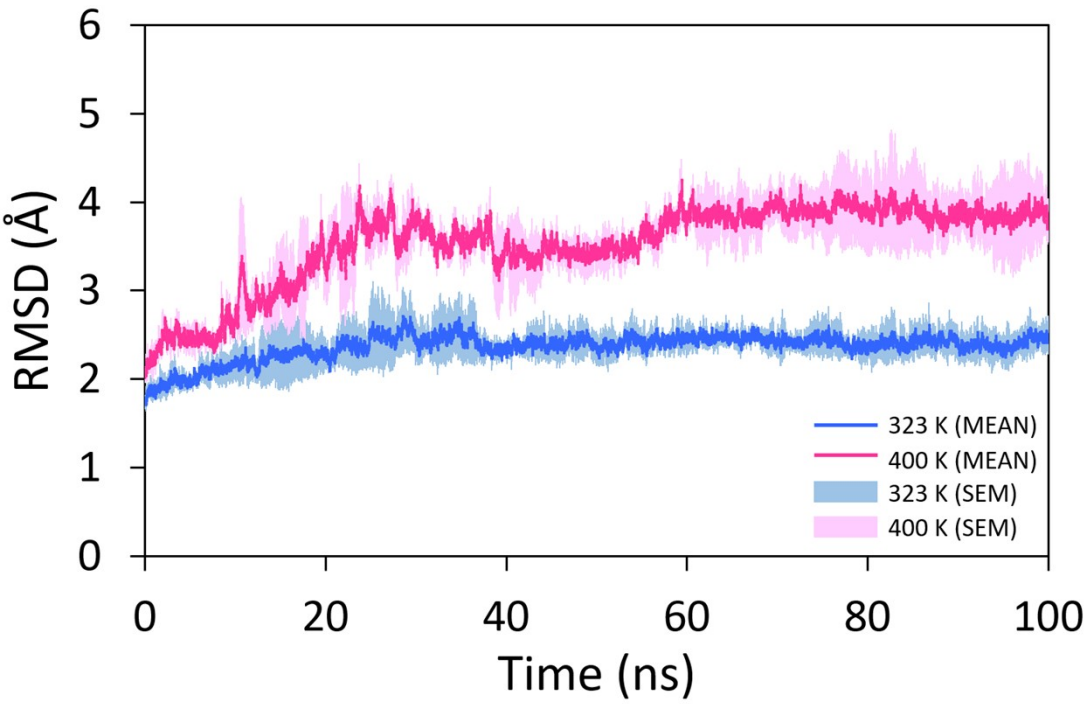

Fig S1 RMSD plot of wild-type LrInu at 323K and 400K.

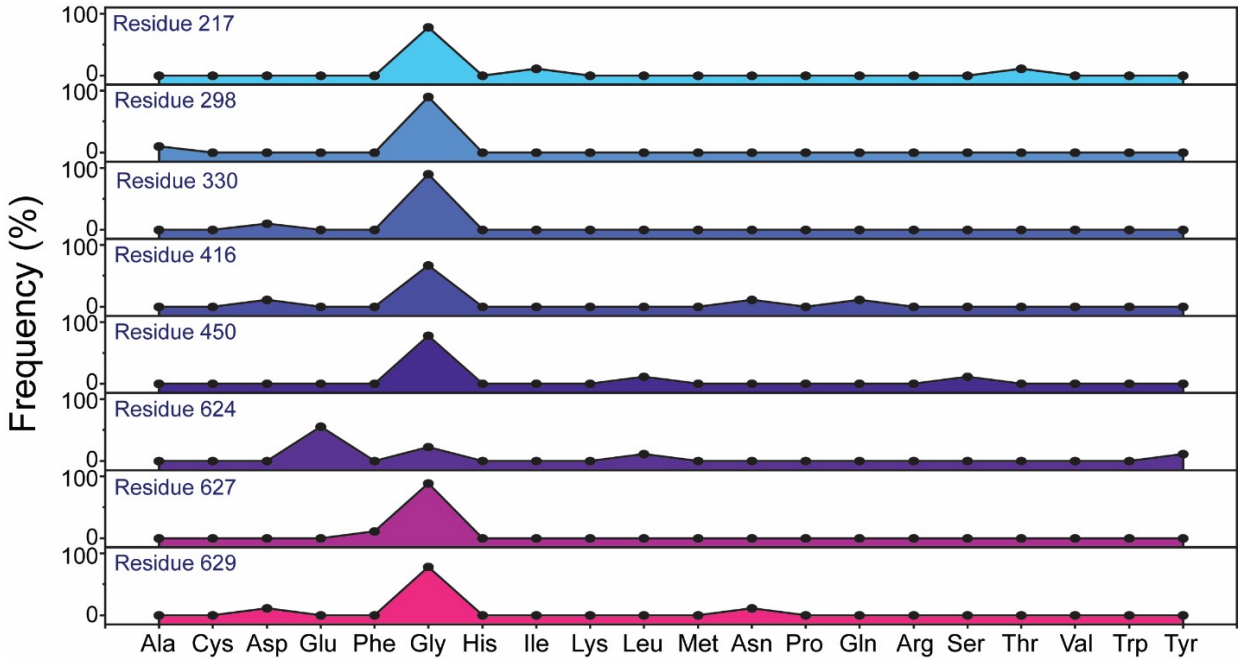

Fig. S2 Conservation analysis of flexible glycine residues of LrInu. The frequency of each amino acid is obtained from a multiple sequence alignment of the 58 inulosucrase sequences.

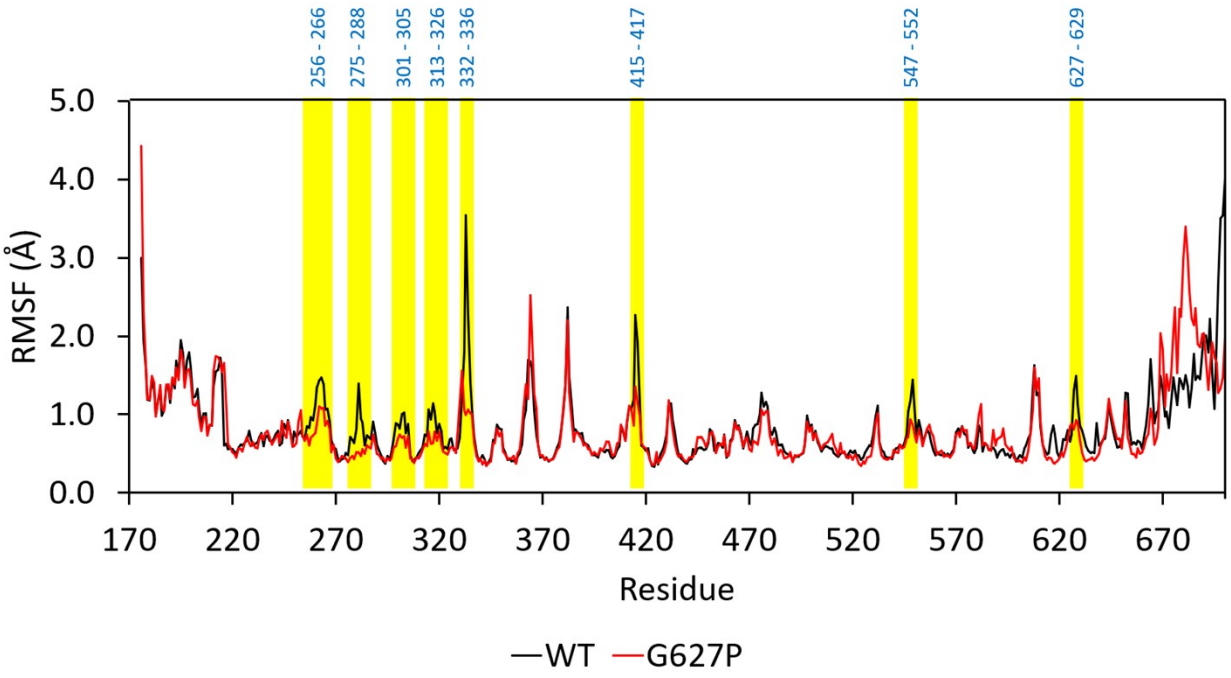

Fig. S3 RMSF plot of WT and G627P mutant LrInu.