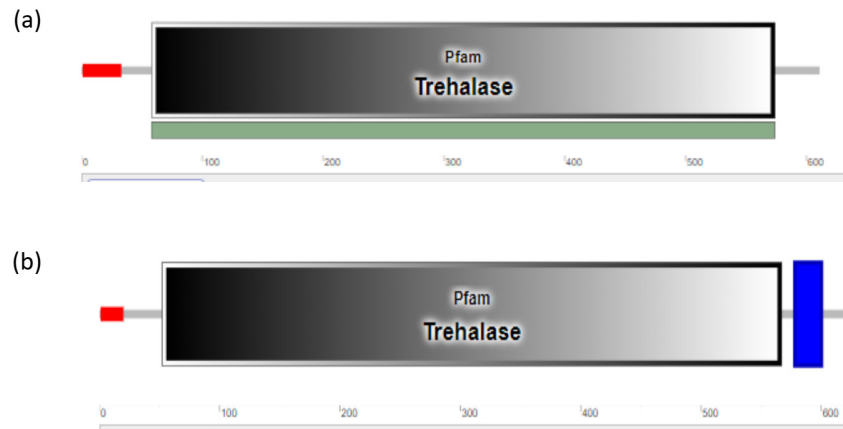


Supplementary Materials



Supplement Figure 1. The protein domain architecture of trehalase genes of *L. vannamei* was predicted by SMART online program (<http://smart.embl-heidelberg.de/>). (a) *LvTre1*, (b) *LvTre2*.

XP 027209266.1	Gfat-like isoform X10	[Penaeus vannamei]	TKTLATDEIPWLYS-----DHRPHANDIFATGFNR
XP 027209265.1	Gfat-like isoform X9	[Penaeus vannamei]	TKTLATDEIPWLYS D-----NQDHRPHANDIFATGFNR
XP 027209264.1	Gfat-like isoform X8	[Penaeus vannamei]	TKTLATDEIPWLYS DSPKVELK-----DHRPHANDIFATGFNR
XP 027209263.1	Gfat-like isoform X7	[Penaeus vannamei]	TKTLATDEIPWLYS DSPKVELK-----DNQDHRPHANDIFATGFNR
XP 027209262.1	Gfat-like isoform X6	[Penaeus vannamei]	TKTLATDEIPWLYS DVVEFGGRSLGARERD-----HRPHANDIFATGFNR
XP 027209261.1	Gfat-like isoform X5	[Penaeus vannamei]	TKTLATDEIPWLYS DVVEFGGRSLGARERD-----DHRPHANDIFATGFNR
XP 027209260.1	Gfat-like isoform X4	[Penaeus vannamei]	TKTLATDEIPWLYS DSPKVELKD---LE-----DNQDHRPHANDIFATGFNR
XP 027209259.1	Gfat-like isoform X3	[Penaeus vannamei]	TKTLATDEIPWLYS DVVEFGGRSLGARERDN-----QDHRPHANDIFATGFNR
XP 027209257.1	Gfat-like isoform X1	[Penaeus vannamei]	TKTLATDEIPWLYS DSPKVELKDLEALPKS-----DNQDHRPHANDIFATGFNR
XP 037775338.1	Gfat-like isoform X16	[Penaeus monodon]	TKTLATDEIPWLYS-----DHRPHANDIFATGFNR
XP 037775337.1	Gfat-like isoform X15	[Penaeus monodon]	TKTLATDEIPWLYS D-----NQDHRPHANDIFATGFNR
XP 037775336.1	Gfat-like isoform X14	[Penaeus monodon]	TKTLATDEIPWLYS DSPKVELK-----DHRPHANDIFATGFNR
XP 037775335.1	Gfat-like isoform X13	[Penaeus monodon]	TKTLATDEIPWLYS DSPKVELKD-----NQDHRPHANDIFATGFNR
XP 037775330.1	Gfat-like isoform X9	[Penaeus monodon]	TKTLATDEIPWLYS DSPKVELKDLE-----DNQDHRPHANDIFATGFNR
XP 037775329.1	Gfat-like isoform X8	[Penaeus monodon]	TKTLATDEIPWLYS DVVEFGGRSLGARERD-----HRPHANDIFATGFNR
XP 037775328.1	Gfat-like isoform X7	[Penaeus monodon]	TKTLATDEIPWLYS DSPKVELKRA---LPKS-----DNQDHRPHANDIFATGFNR
XP 037775327.1	Gfat-like isoform X6	[Penaeus monodon]	TKTLATDEIPWLYS DVVEFGGRSLGARERDN-----QDHRPHANDIFATGFNR
XP 037775325.1	Gfat-like isoform X4	[Penaeus monodon]	TKTLATDEIPWLYS DSPKVELKDLEALPKS-----DNQDHRPHANDIFATGFNR
XP 037775324.1	Gfat-like isoform X3	[Penaeus monodon]	TKTLATDEIPWLYS DVVEFGGRSLGARERDLEDN---QDHRPHANDIFATGFNR
XP 037775322.1	Gfat-like isoform X1	[Penaeus monodon]	TKTLATDEIPWLYS DVVEFGGRSLGARERDLEALPKSDNQDHRPHANDIFATGFNR

Supplement Figure 2. The alternative splicing of GFATs in two shrimp *L. vannamei* and *P. monodon*.