

## Supplementary table captions

**Table S1** Strains and plasmids used in the present study

**Table S2** Primers used in gene cloning, plasmid construction and quantitative RT-qPCR analysis

Table S1

Strain/plasmid	Description	Source/Reference
Strain		
Trans1-T1	F- $\phi$ 80( <i>lacZ</i> ) $\Delta$ M15 $\Delta$ <i>lacX74</i> <i>hsdR</i> ( $r_k^-$ , $m_k^+$ ) $\Delta$ <i>recA1398</i> <i>endA1tonA</i>	TransGen, Beijing, China
<i>Transetta</i> (DE3)	F <sup>-</sup> <i>ompT</i> <i>hsdS</i> <sub>B</sub> ( $r_B^-m_B^-$ ) <i>gal dcm lacY1</i> (DE3)pRARE( <i>argU</i> , <i>argW</i> , <i>ileX</i> , <i>glyT</i> , <i>leuW</i> , <i>proL</i> ))Cam <sup>r</sup> )	TransGen, Beijing, China
BL21(DE3)	F <sup>-</sup> <i>ompT hsdS</i> ( $r_B^-m_B^-$ ) <i>gal dcm</i> (DE3)	TransGen, Beijing, China
Plasmid		
<i>pEASY</i> <sup>TM</sup> -Blunt	General cloning vector, T7 promoter, f1 ori, Amp and Kan	TransGen, Beijing, China
pET-28a(+)	General expression vector, T7 promoter, f1 ori, Kan	Novagen, Madison, USA
pGro7	A molecular chaperone plasmid expressing GroES-GroEL, <i>araB</i> promoter, Cm <sup>r</sup>	Takara, Dalian, China
pKJE7	A molecular chaperone plasmid expressing DnaK-DnaJ-GrpE, <i>araB</i> promoter, Cm <sup>r</sup>	Takara, Dalian, China
<i>pEASY</i> -OcUGE1	<i>pEASY</i> <sup>TM</sup> -Blunt derived vector containing <i>OcUGE1</i> gene	This study
<i>pEASY</i> -OcUGE2	<i>pEASY</i> <sup>TM</sup> -Blunt derived vector containing <i>OcUGE2</i> gene	This study
<i>pEASY</i> -OcUXE1	<i>pEASY</i> <sup>TM</sup> -Blunt derived vector containing <i>OcUXE1</i> gene	This study
<i>pEASY</i> -OcUXE2	<i>pEASY</i> <sup>TM</sup> -Blunt derived vector containing <i>OcUXE2</i> gene	This study
pET28a-OcUGE1	pET-28a (+) derived vector containing <i>OcUGE1</i> gene	This study
pET28a-OcUGE2	pET-28a (+) derived vector containing <i>OcUGE2</i> gene	This study
pET28a-OcUXE1	pET-28a (+) derived vector containing <i>OcUXE1</i> gene	This study
pET28a-OcUXE2	pET-28a (+) derived vector containing <i>OcUXE2</i> gene	This study
pET28a-tOcUXE1	pET-28a (+) derived vector containing truncated <i>OcUXE1</i> gene	This study
pET28a-tOcUXE2	pET-28a (+) derived vector containing truncated <i>OcUXE2</i> gene	This study

Table S2

Primers	Sequences(5'-3')	Description
FUXE1-1	AGCAAGAAATCACCACTCTC	Forward primer used for <i>OcUXE1</i> amplification in the first round
RUXE1-1	ATATGTGTCTAGACATTATGAT	Reverse primer used for <i>OcUXE1</i> amplification in the first round
FUXE1-2	ATGCTACCTAGTAGGGCGAG	Forward primer used for <i>OcUXE1</i> amplification in the second round
RUXE1-2	TCAGGGAGCCGAAGCTAAAC	Reverse primer used for <i>OcUXE1</i> amplification in the second round
FUXE2-1	ATGAAGGGGCTCTCTCAG	Forward primer used for <i>OcUXE2</i> amplification in the first round
RUXE2-1	TTCTGAACTAATGATGCAGT	Reverse primer used for <i>OcUXE2</i> amplification in the first round
FUXE2-2	ATGCCCCAGTCAGCAGGAC	Forward primer used for <i>OcUXE2</i> amplification in the second round
RUXE2-2	TCAAATGCCATGGCCAACG	Reverse primer used for <i>OcUXE2</i> amplification in the second round
FUGE1-1	AAACCCTCATTTAGTCTCATCTTCTTGA	Forward primer used for <i>OcUGE1</i> amplification in the first round
RUGE1-1	CGTCTTTTCCGTTTCCTTATTCTTT	Reverse primer used for <i>OcUGE1</i> amplification in the first round
FUGE1-2	ATGGGATCGGAGTGTAAGACGGAGA	Forward primer used for <i>OcUGE1</i> amplification in the second round
RUGE1-2	TCAAGCCTTTGGCCTGTAACCGTACTGATT	Reverse primer used for <i>OcUGE1</i> amplification in the second round
FUGE2-1	TCTCGCTCTTGATTCTTGATTTCG	Forward primer used for <i>OcUGE2</i> amplification in the first round
RUGE2-1	TGGTTTGGGTTCCCTCCTTTAAGT	Reverse primer used for <i>OcUGE2</i> amplification in the first round
FUGE2-2	ATGGCGGGTTTGAACATCATGGTGA	Forward primer used for <i>OcUGE2</i> amplification in the second round
RUGE2-2	CTAATTATTCAGTAGTATTTTAGCTTCC	Reverse primer used for <i>OcUGE2</i> amplification in the second round
F28aUXE 1	CGCGGATCCGAATTCATGGGATCGGAGTGTA	Forward primer used for <i>pET28a-OcUXE1</i> construction
R28aUXE 1	CGCGGATCCGAATTCATGGCGGGTTTGAACA	Reverse primer used for <i>pET28a-OcUXE1</i> construction
F28aUXE 2	TGCGGCCGCAAGCTTCTAATTATTCAGTAGT	Forward primer used for <i>pET28a-OcUXE2</i> construction
R28aUXE 2	GTGCGGCCGCAAGCTTCTATTTCTCCCCGTTTCAG GAT	Reverse primer used for <i>pET28a-OcUXE2</i> construction

F28aUGE 1	CGCGGATCCGAATTCATGGGATCGGAGTGTA	Forward primer used for <i>pET28a-OcUGE1</i> construction
R28aUGE 1	TGCGGCCGCAAGCTTTCAAGCCTTTGGCCTG	Reverse primer used for <i>pET28a-OcUGE1</i> construction
F28aUGE 2	CGCGGATCCGAATTCATGGCGGGTTTGAACA	Forward primer used for <i>pET28a-OcUGE2</i> construction
R28aUGE 2	TGCGGCCGCAAGCTTCTAATTATTCAGTAGT	Reverse primer used for <i>pET28a-OcUGE2</i> construction
FRTUXE 1	GTTCGTCCATGCTGACATTG	Forward primer used for <i>OcUXE1</i> RT-qPCR
RRTUXE 1	CATCGGCCTGCATCAATTA	Reverse primer used for <i>OcUXE1</i> RT-qPCR
FRTUXE 2	GATCAACCGCGAATTGAACT	Forward primer used for <i>OcUXE2</i> RT-qPCR
RRTUXE 2	TAATGCAGGAGACCCTCCAC	Reverse primer used for <i>OcUXE2</i> RT-qPCR
FRTUGE 1	AAGAACTTGGCTGGAAAGCA	Forward primer used for <i>OcUGE1</i> RT-qPCR
RRTUGE 1	TGGGCCTTTTATCCCACATA	Reverse primer used for <i>OcUGE1</i> RT-qPCR
FRTUGE 2	CTTCGAGGATGACCCATGAT	Forward primer used for <i>OcUGE2</i> RT-qPCR
RRTUGE 2	AATTCCTCCTTGGGTTTGG	Reverse primer used for <i>OcUGE2</i> RT-qPCR

## Supplementary figure legend

Figure S1. SDS-PAGE analysis of crude extracts from *E. coli* co-expressing both pET28atOcUXE1 and pGro (1), and pET28atOcUXE2 and pKJE7 (2). Control, cell extracts of the empty vector without expressed molecular chaperones. Arrows refer to the expressed tOcUXE1 and tOcUXE2 proteins; \* stands for the expressed molecular chaperones; Protein molecular mass standards (M, in kDa) are indicated on the right.

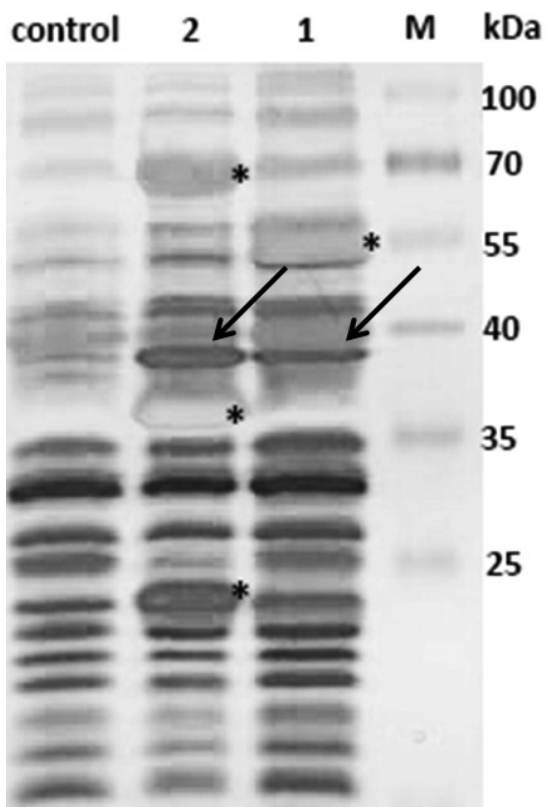


Fig. S1