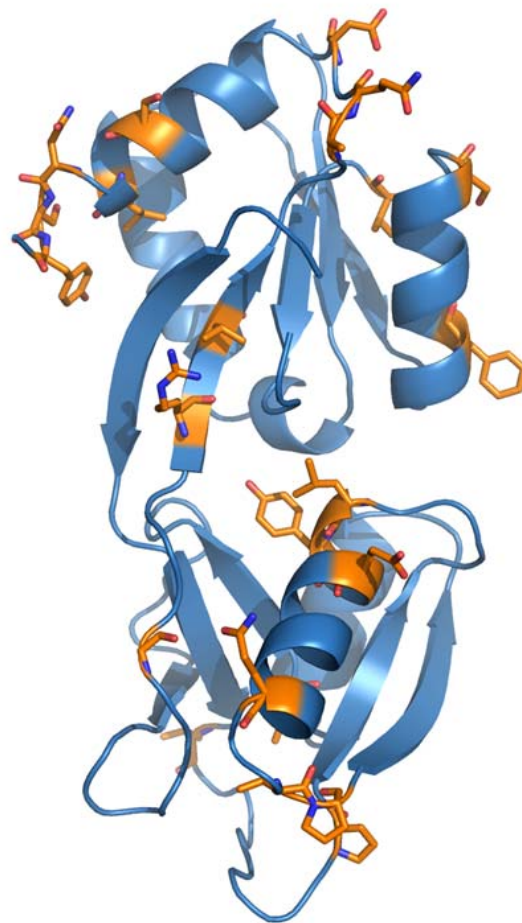


Supplementary Material

	1	10	20	30	40	50	60	70	
<i>Y.pseudotuberculosis</i>	MTNANRP	IINLDDL	LLRRTFV	AVADLNTF	FAAAAAV	CRTQSAV	SQQMRLE	QLVGKEL	FARHGRNKLLTEH
<i>Y.enterocolitica</i>	MTNANRP	IINLDDL	LLRRTFV	AVADLNTF	FAAAAAV	CRTQSAV	SQQMRLE	QLVGKEL	FARHGRNKLLTEH
	80	90	100	110	120	130	140		
<i>Y.pseudotuberculosis</i>	GLQLLG	YARKILR	FNDEACT	SLMYSN	MEGSLI	IIGASDDT	ADTLLP	FLNRRVATLYPRLAIDVRVKRSPFI	
<i>Y.enterocolitica</i>	GLQLLG	YARKILR	FNDEACT	SLMYSN	VEGSLI	IIGASDDT	ADTLLP	FLNRRVATLYPRLAIDVRVKRSPFI	
	150	160	170	180	190	200	210		
<i>Y.pseudotuberculosis</i>	ADMLS	SGEVDLAI	TTAKVDS	HPHVILRTS	PTLWYCS	VQDYQFQ	PGEPVPLV	VMDPEPSLYREMAIEHLTQAG	
<i>Y.enterocolitica</i>	ADMLS	HGEADLAI	TTAKVDN	HPHVILRTS	PTLWYCS	ADYQFQ	PGESVPLV	VMDPEPSLFRDMAIEHLTRAG	
	220	230	240	250	260	270	280		
<i>Y.pseudotuberculosis</i>	VPWRIA	YVASSLS	AIRAAVR	AGLV	TARPIEM	MSPDLR	VLGETE	GLPGLPETHYVLCCKDKQCDNELALAI	
<i>Y.enterocolitica</i>	IAWRIA	YVASSLS	AIRAAVR	AGLV	I	TARPIEM	MSPDLR	VLGETEGLPRLPETHYSLCKDSRCSNELALAI	
	290	300	310						
<i>Y.pseudotuberculosis</i>	FSALQ	NSYQHT	MSESSL	LILDS	DLTG	DEDED			
<i>Y.enterocolitica</i>	FDAMQ	TGHQH	LQSG	TDLTL	GSD	FLIDD	QS		

Supplementary Fig. 1



Supplementary Fig. 2