

Table S1: Amino acid sequences of a) *Staphylococcus aureus* alpha-hemolysin (<https://www.ncbi.nlm.nih.gov/protein/OBY01299.1>, accessed on 1 October 2022), b) *Staphylococcus aureus* toxic shock syndrome toxin-1 (TSST-1) [32] , c) *Staphylococcus aureus* enterotoxin type A (<https://www.ncbi.nlm.nih.gov/protein/QTN49470.1>, accessed on 1 October 2022) d, e) Shiga toxin Stx2 subunit A and subunit B [33]

a) Toxin 1: *Staphylococcus aureus*, a hemolysin

10	20	30	40	50
TTLLLSILM	MKTRIVSSVT	NPVANAADSD	INIKTGTTDI	GSNTTVKTGD
60	70	80	90	100
LVTYDKENGM	HKKVFYSFID	DKNHNKLLV	IRTKGTIAGQ	YRVYSEEGAN
110	120	130	140	150
KSGLAWPSAF	KVQLQLPDNE	VAQISDYYP	NSIDTKEYMS	TLTYGFNGNV
160	170	180	190	200
TGDDTGKIGG	LIGANVSIGH	TLKYVQPDFK	TILESPTDKK	VGWKVIFNNM
210	220	230	240	250
VNQNWGPYDR	DSWNPVYGNQ	LFMKTRNGSM	KAAENFLDPN	KASSLLSSGF
260	270	280	290	300
SPDFATVITM	DRKASKQQTN	IDVIYERVRD	DYQLHWTSTN	WKGTNTKDKW
310				
TDRSSERYKI	DWEKEEMTN			

b) Toxin 2: *Staphylococcus aureus*, toxic shock syndrome toxin-1

10	20	30	40	50
MNKKLLMNFF	IVSPLLLATI	ATDFTPVPLL	SNQIIKTAKA	STNDNIKDLL
60	70	80	90	100
DWYSSGSDTF	TNSEVLDNSL	GSMRIKNTDG	SISLIIFPSP	YSPAFTKGE

110	120	130	140	150
KVDLNTKRTK	KSQHTSEGTY	IHFQISGVTN	TEKLPTPIEL	PLKVKVHGKD
160	170	180	190	200
SPLKYWPKFD	KKQLAISTLD	FEIRHQLTQI	HGLYRSSDKT	GGYWKITMND
210	220	230		
GSTYQSDLSK	KFEYNTEKPP	INIDEIKTIE	AEIN	

c) Toxin 3: *Staphylococcus aureus*, enterotoxin type A

10	20	30	40	50
MKKTAFILLL	FIALTWTTSP	LVNGSEKSEE	INEKDLRKKS	ELQGAALGNL
60	70	80	90	100
KQIYYYNEKA	KTENKESHDQ	FLQHTILFKG	FFTNHWSYND	LLVDFDSKDI
110	120	130	140	150
VDKYKGKKVD	LYGAYYGYQC	AGGTPNKTAC	MYGGVTLHDN	NRLTEEEKVP
160	170	180	190	200
INLWLDGKQN	TVPLETVKTN	KKNVTVQELD	LQARRYLQEK	YNLYNSDVFD
210	220	230	240	250
GKVQRGLIVF	HTSTEPSVNY	DLFGAQGQNS	NTLLRIYRDN	KTINSENMH
DIYLYTS				

d) Toxin 4: *Escherichia coli*, shiga toxin Stx2, subunit A

10	20	30	40	50
MSVINHTPPG	SYFAVDIRGL	DVYQARFDHL	RLIIEQNNLY	VAGFVNTATN
60	70	80	90	100
TFYRFSDFTH	ISVPGVTTVS	MTDSSYTTL	QRVAALERSG	MQISRHSLVS
110	120	130	140	150
SYLALMEFSG	NTMTRDASRA	VLRFVTVTAE	ALRFRQIQRE	FRQALSETAP
160	170	180	190	200
VYTMTPGDVD	LTLNWGRISN	VLPEYRGEDG	VRVGRISFNN	ISAILGTVAV
210	220	230	240	250
ILNCHHQGAR	SVRAVNEESQ	PECQITGDRP	VIKINNTLWE	SNTAAAFNLR

260  
KSQFLYTTGK

e) Toxin 4: *Escherichia coli*, shiga toxin Stx2, subunit B

10	20	30	40	50
MKKMFMAVLF	ALASVNAMAA	DCAKGKIEFS	KYNEDDTFTV	KVDGKEYWTS
60	70	80		
RWNLQPLLQS	AQLTGMTVTI	KSSTCESGSG	FAEVQFNND	