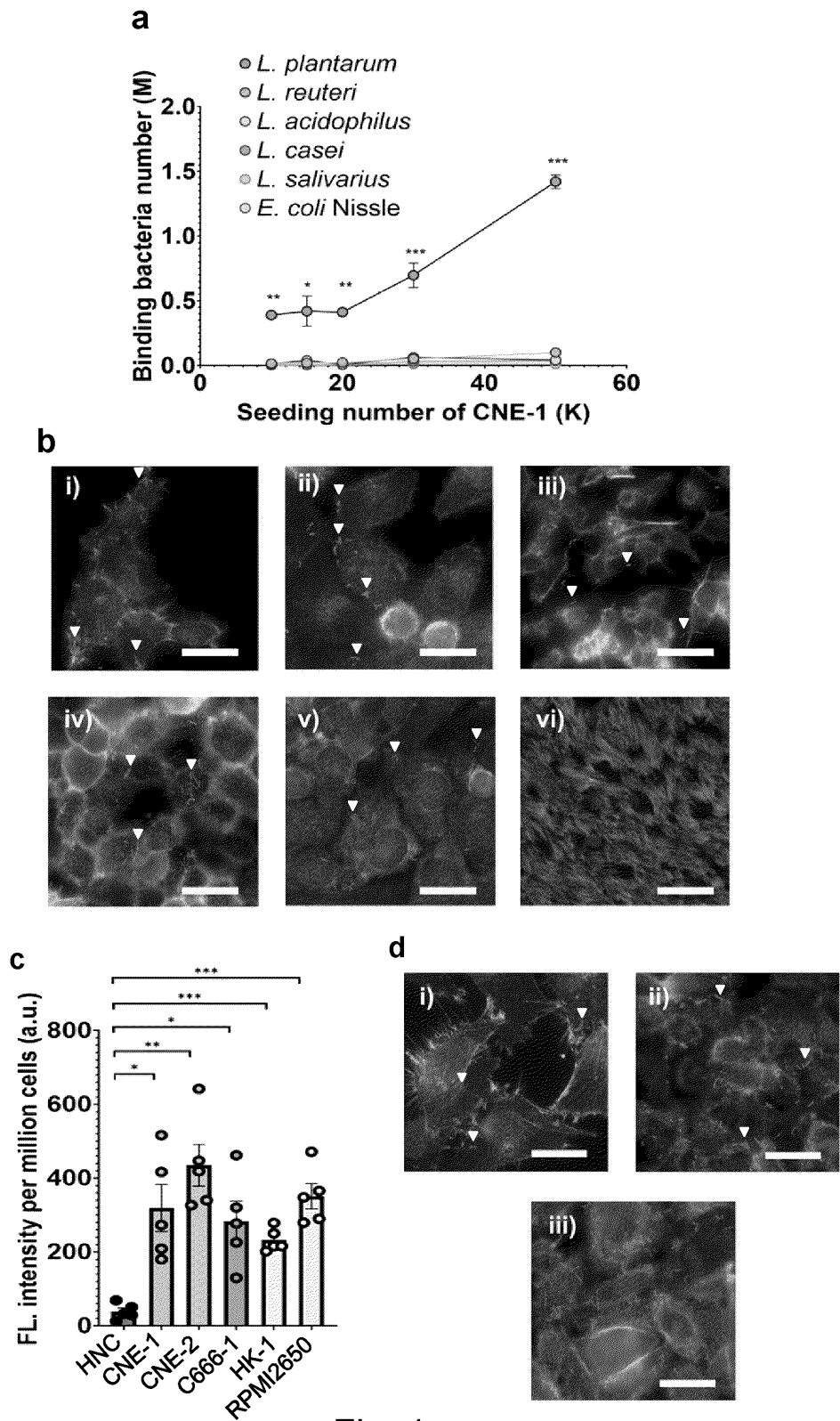




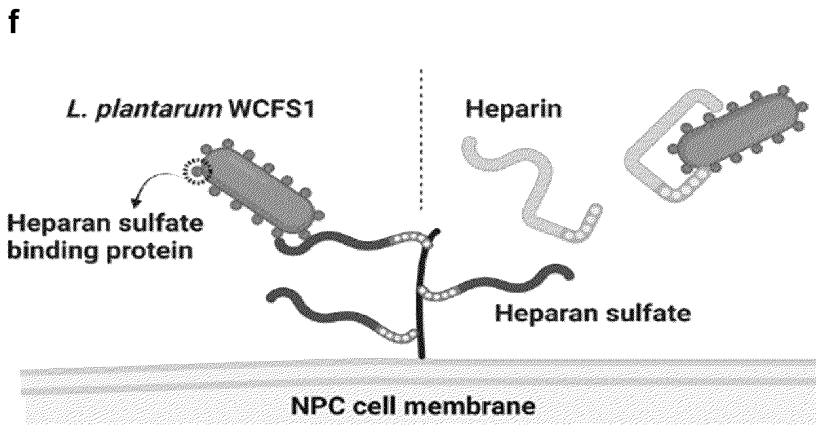
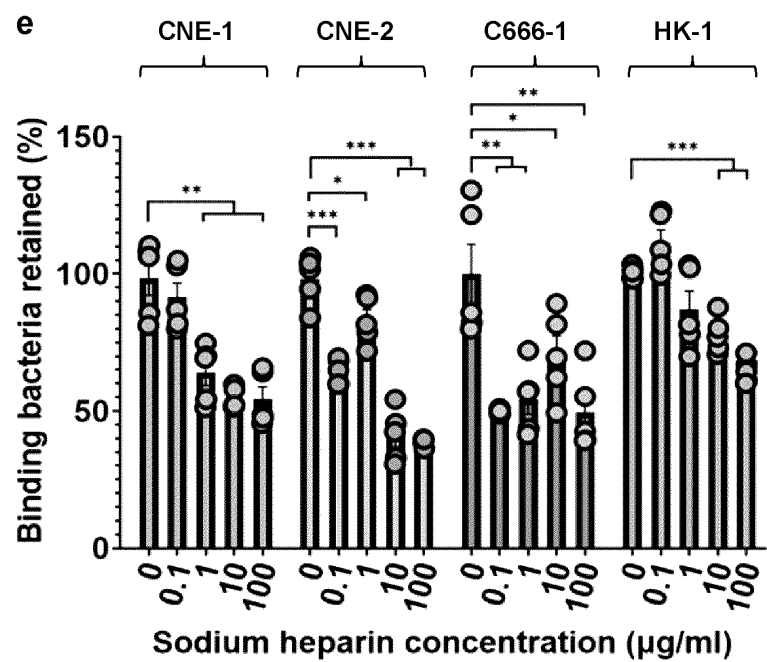
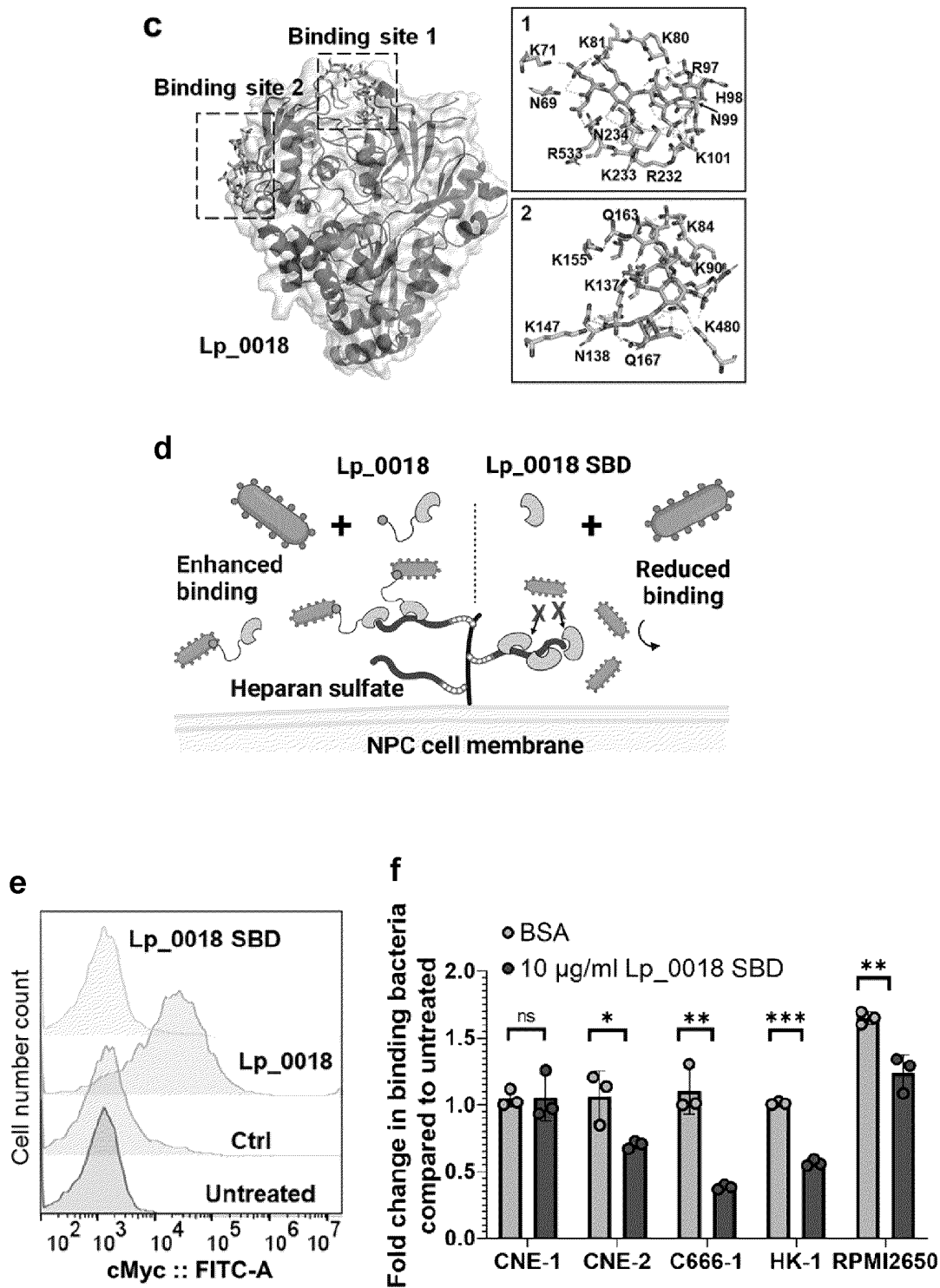


Fig. 1





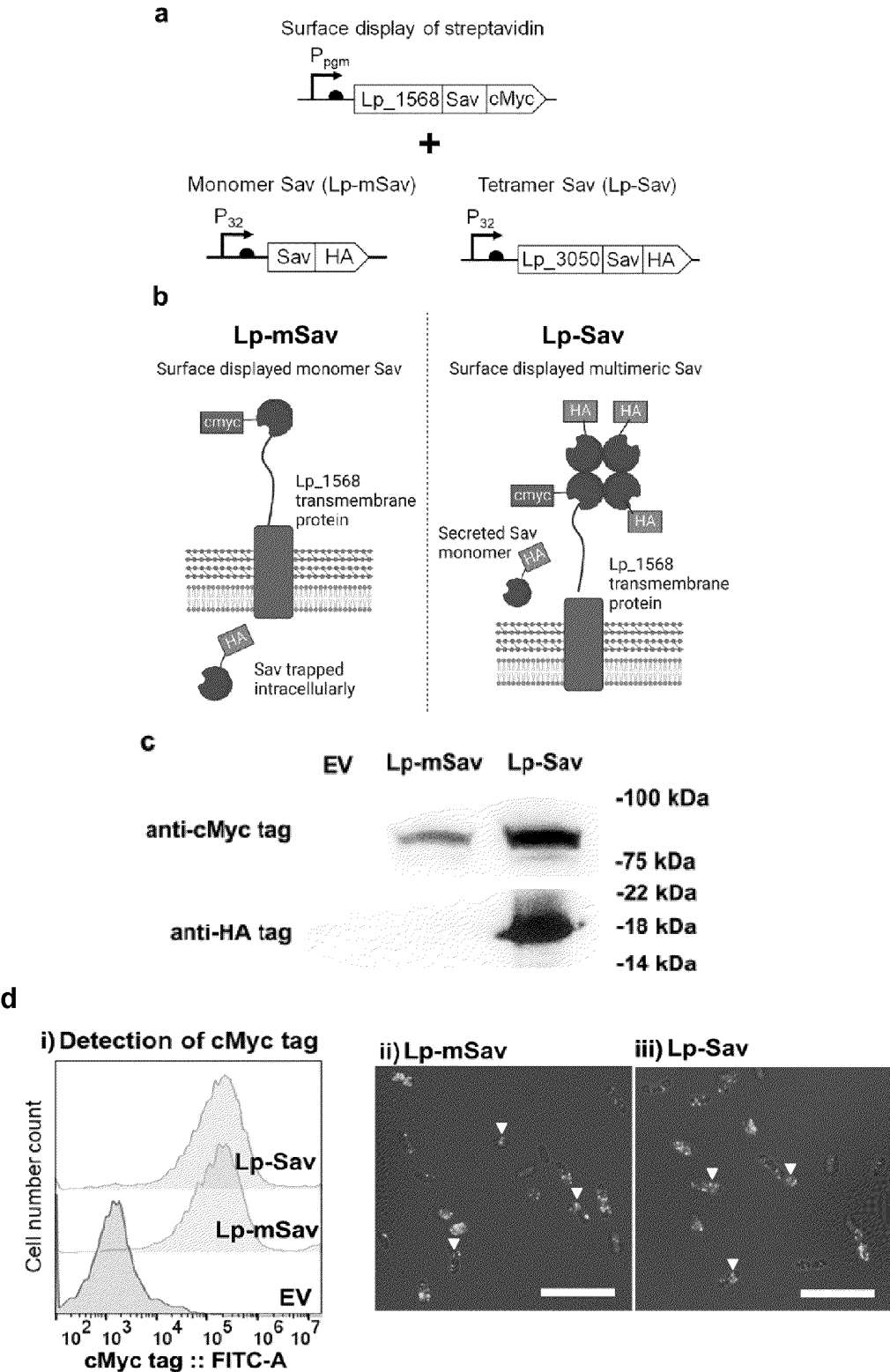


Fig. 3

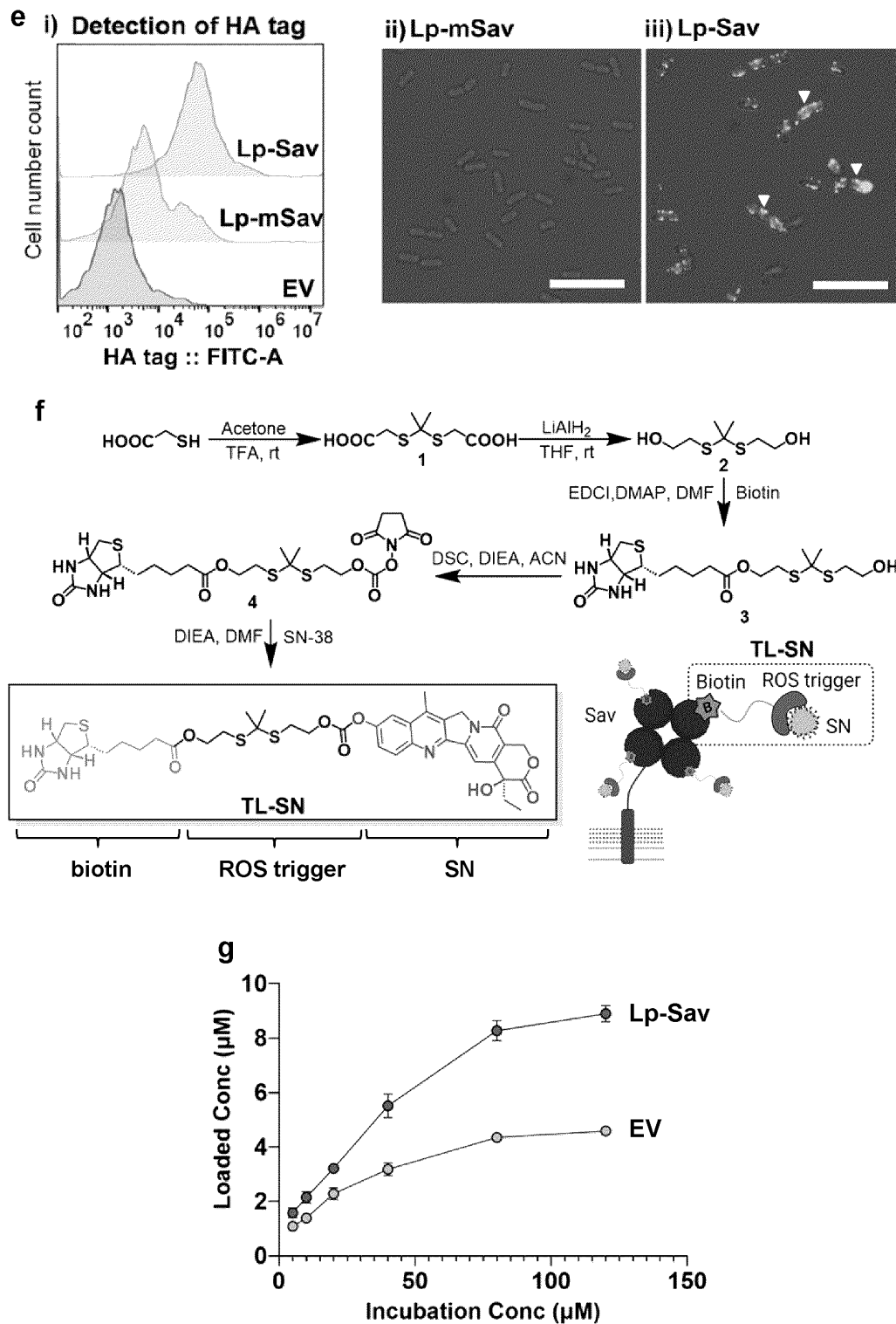


Fig. 3

7/16

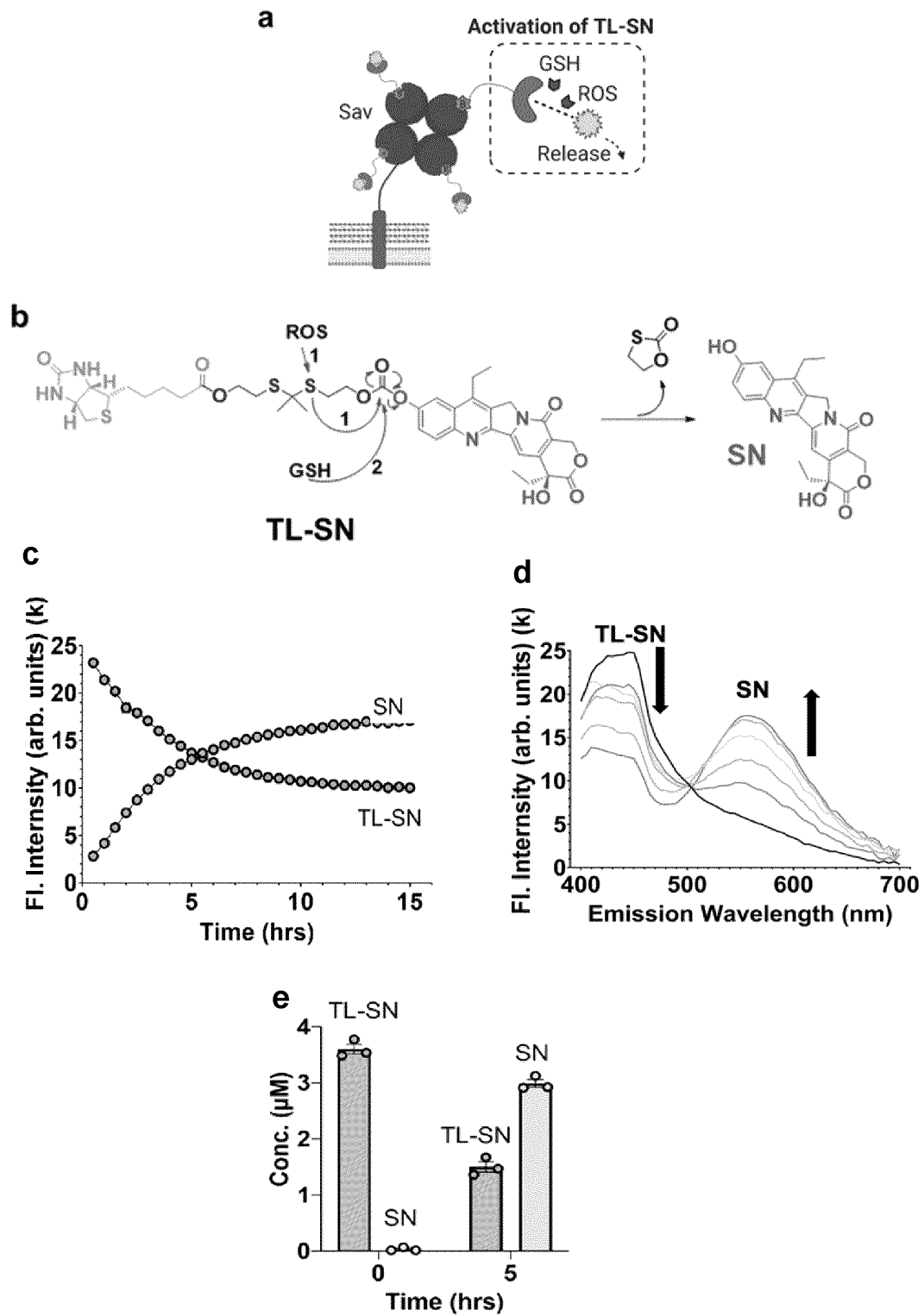


Fig. 4

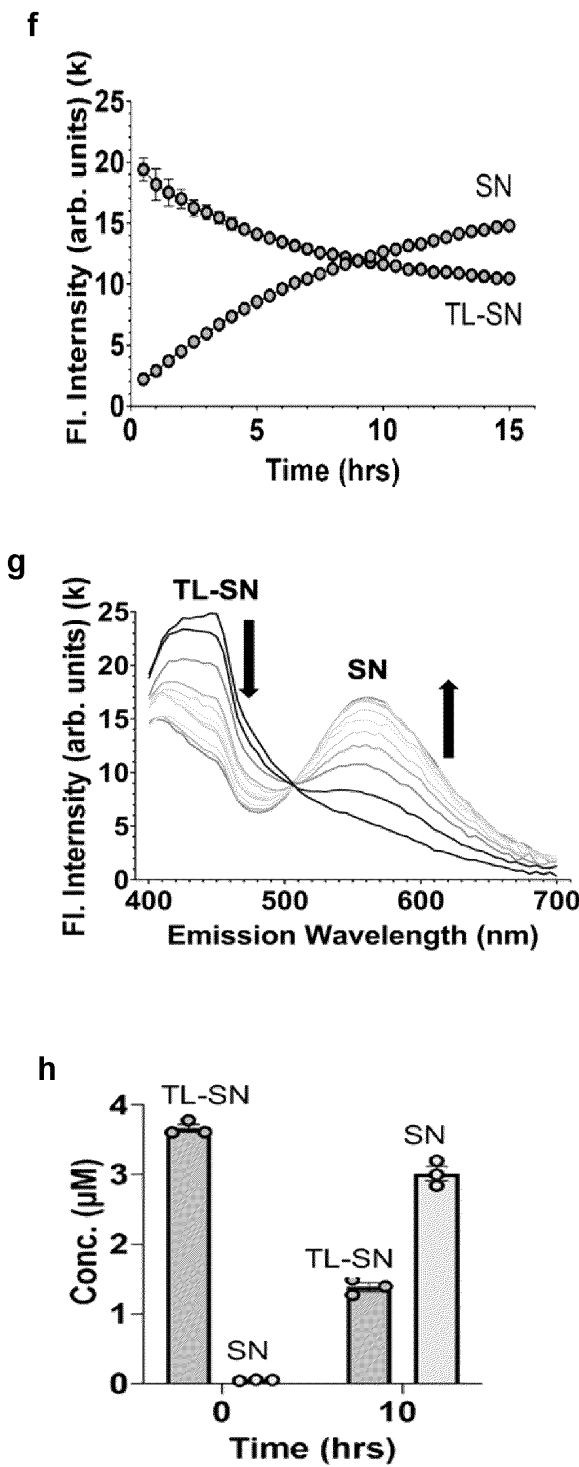


Fig. 4

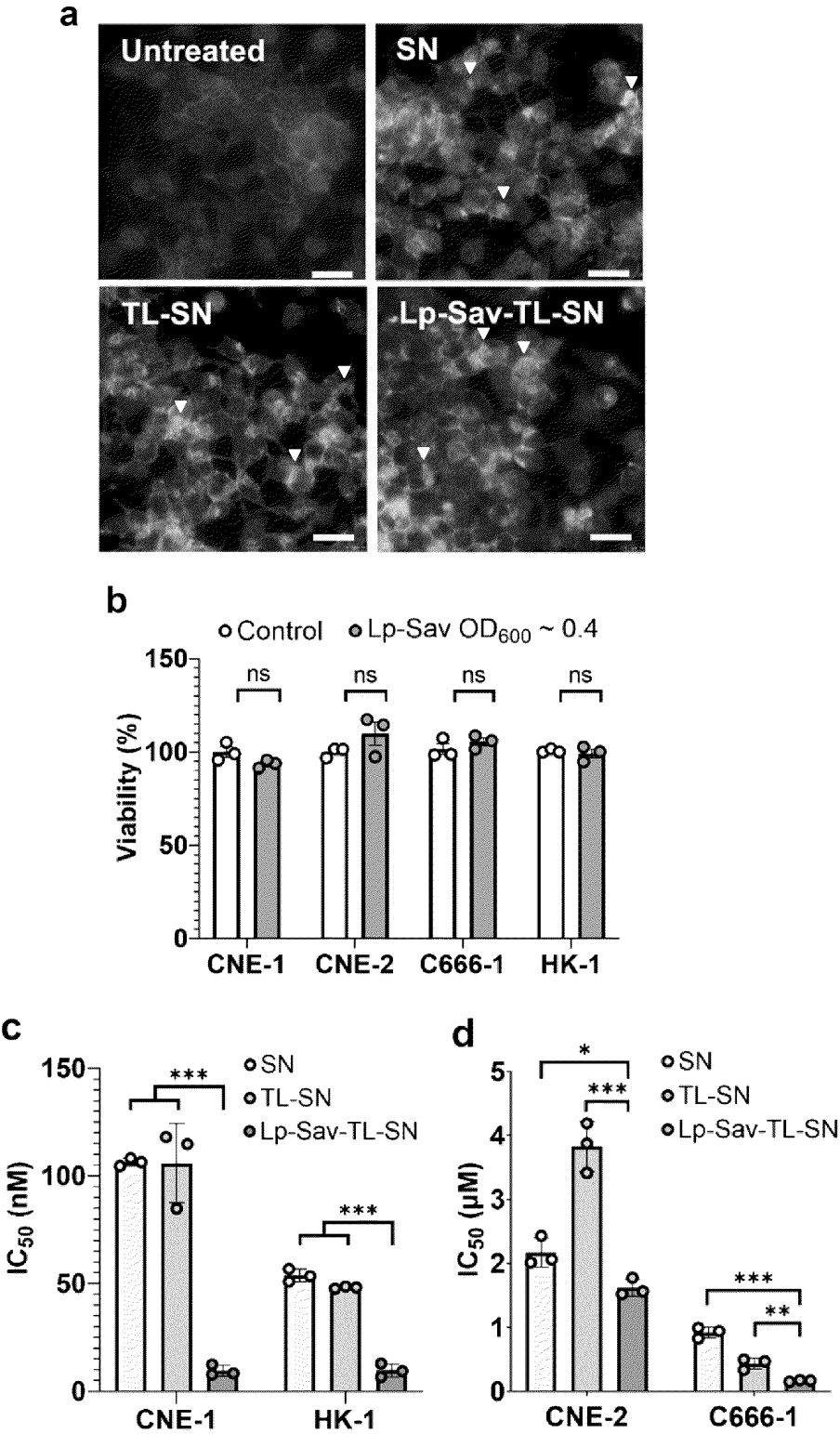


Fig. 5

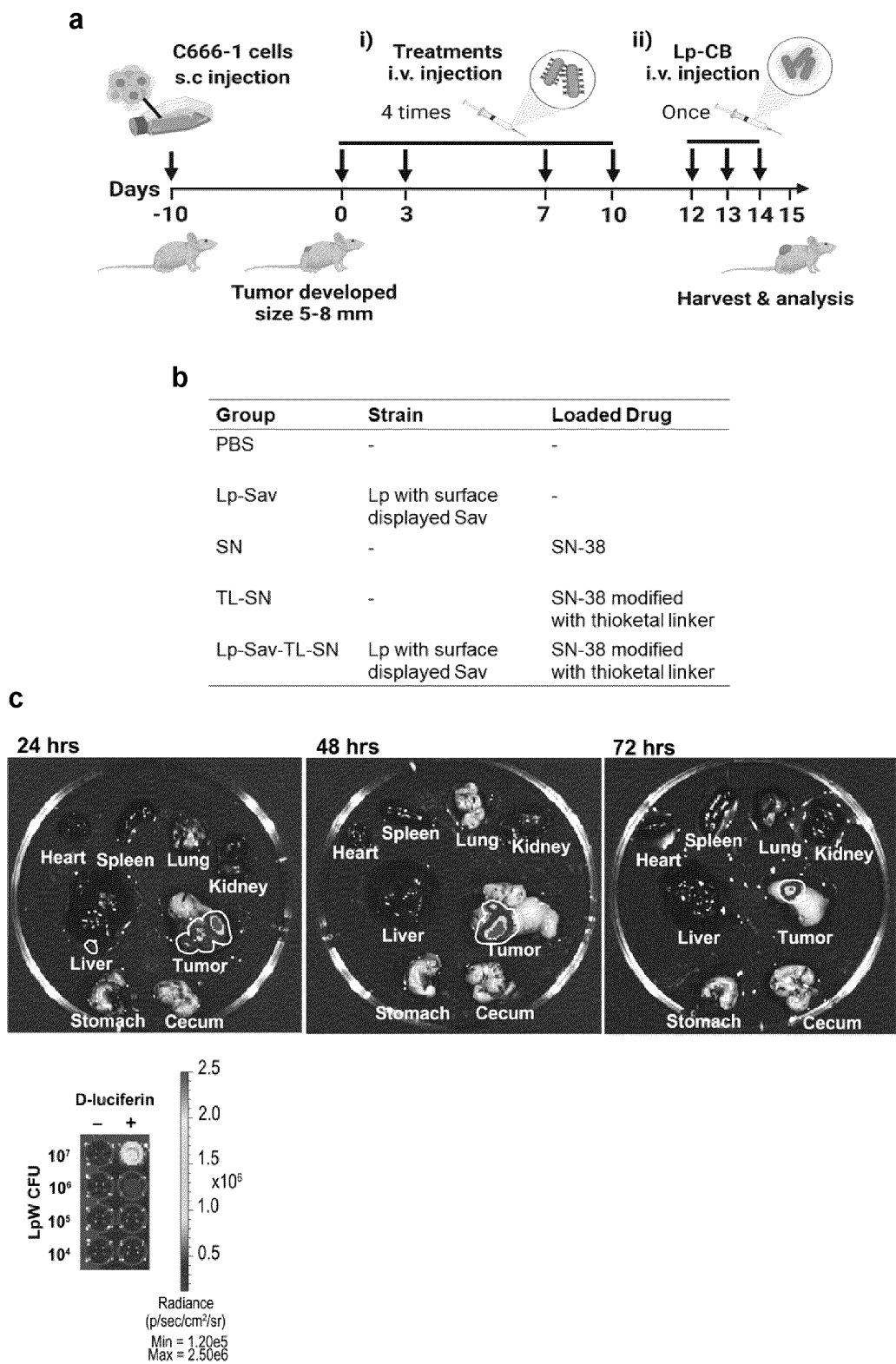


Fig. 6

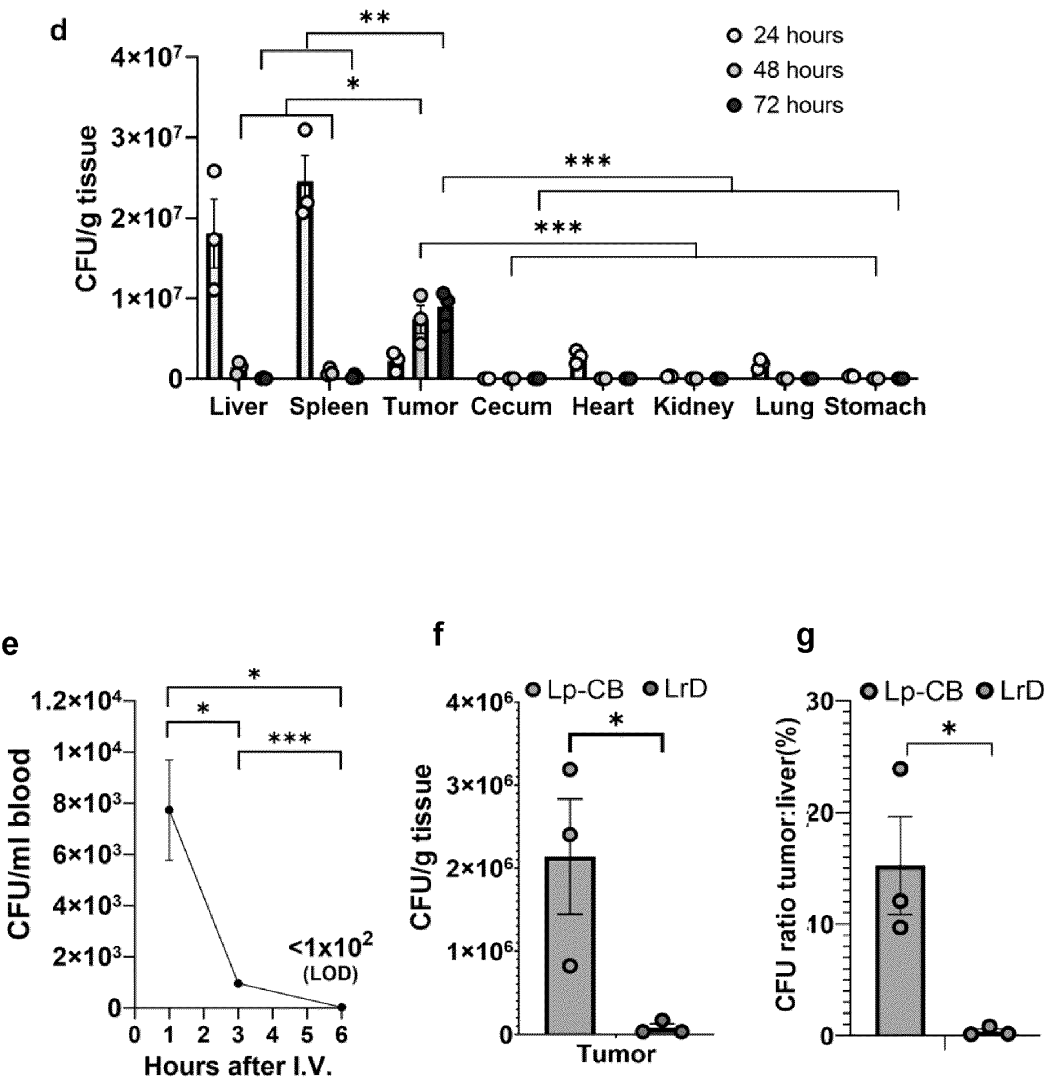


Fig. 6

12/16

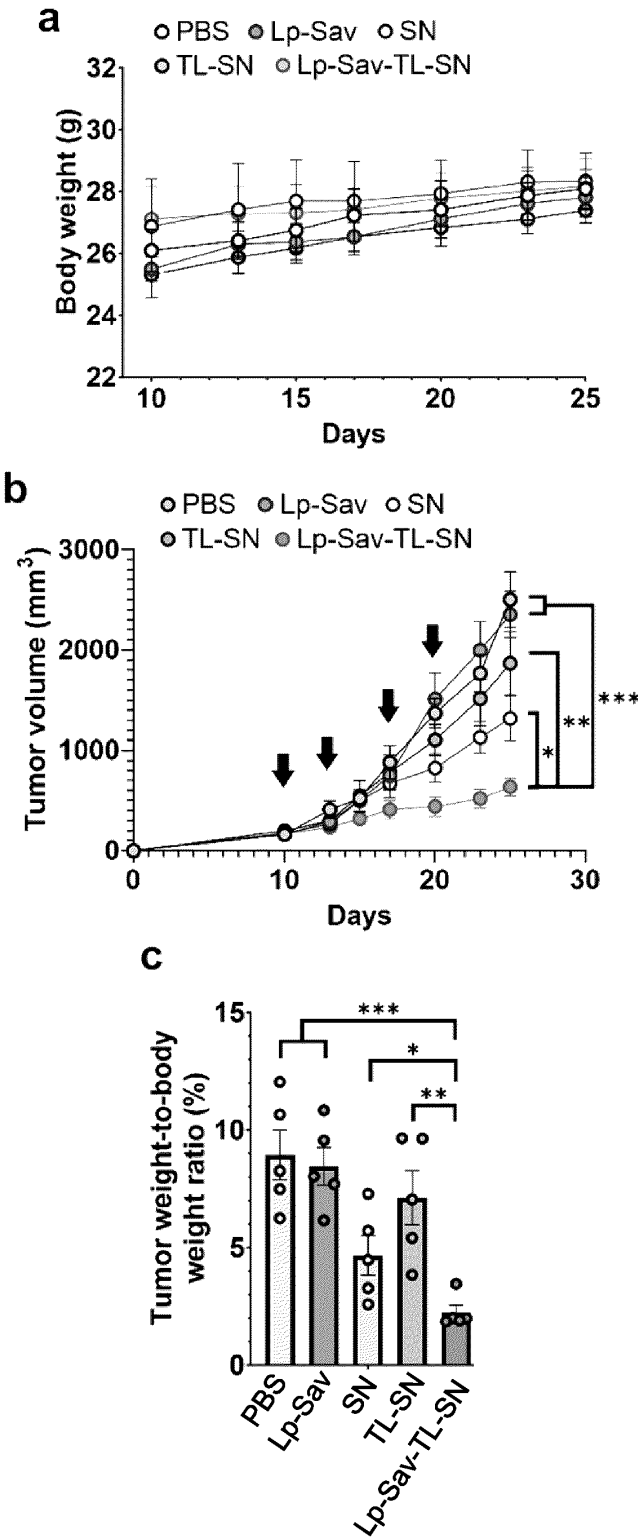


Fig. 7

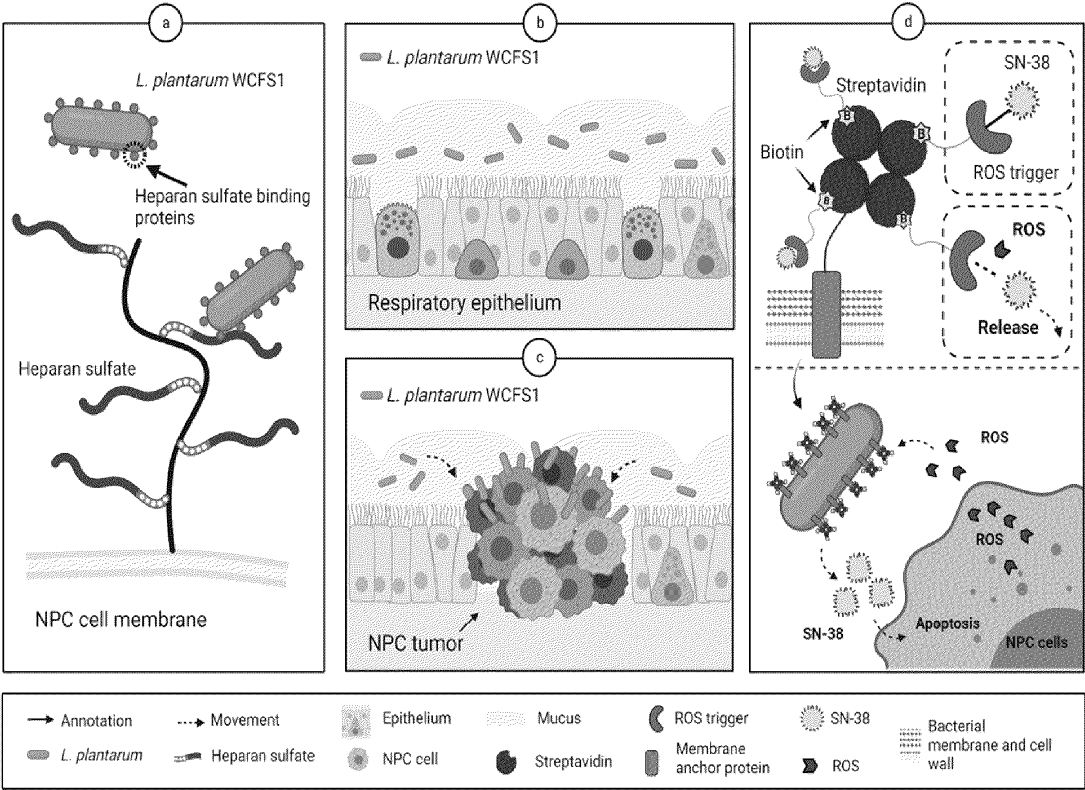


Fig. 8

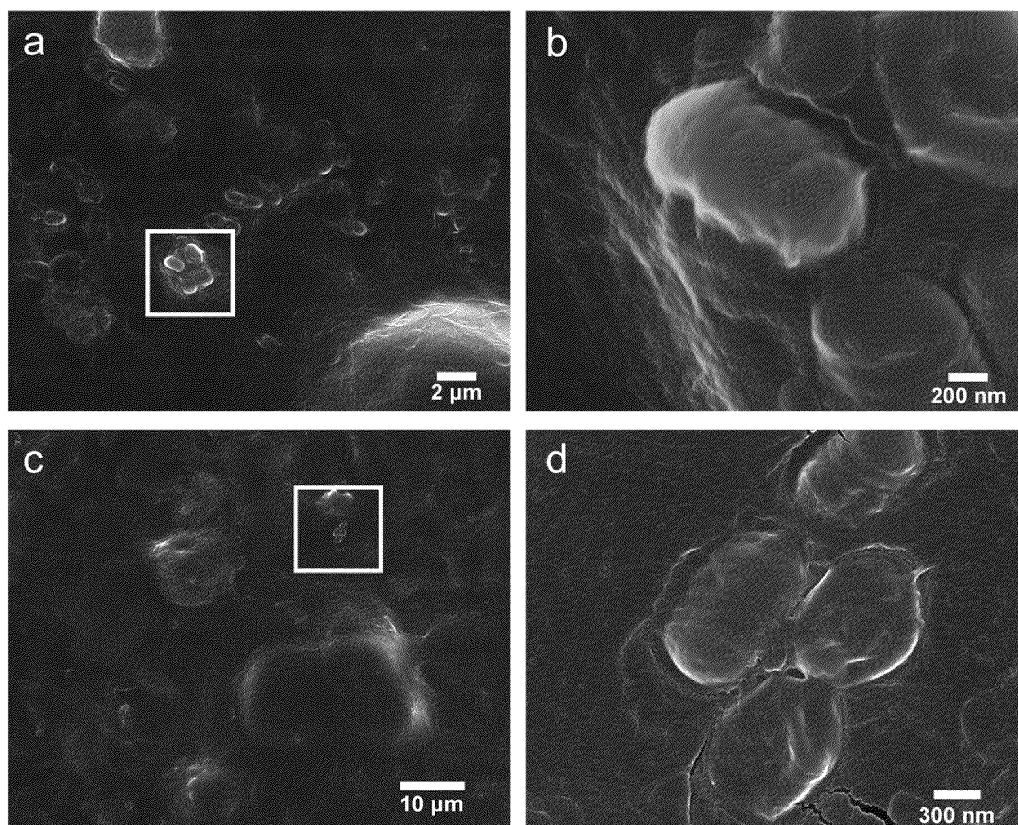


Fig. 9

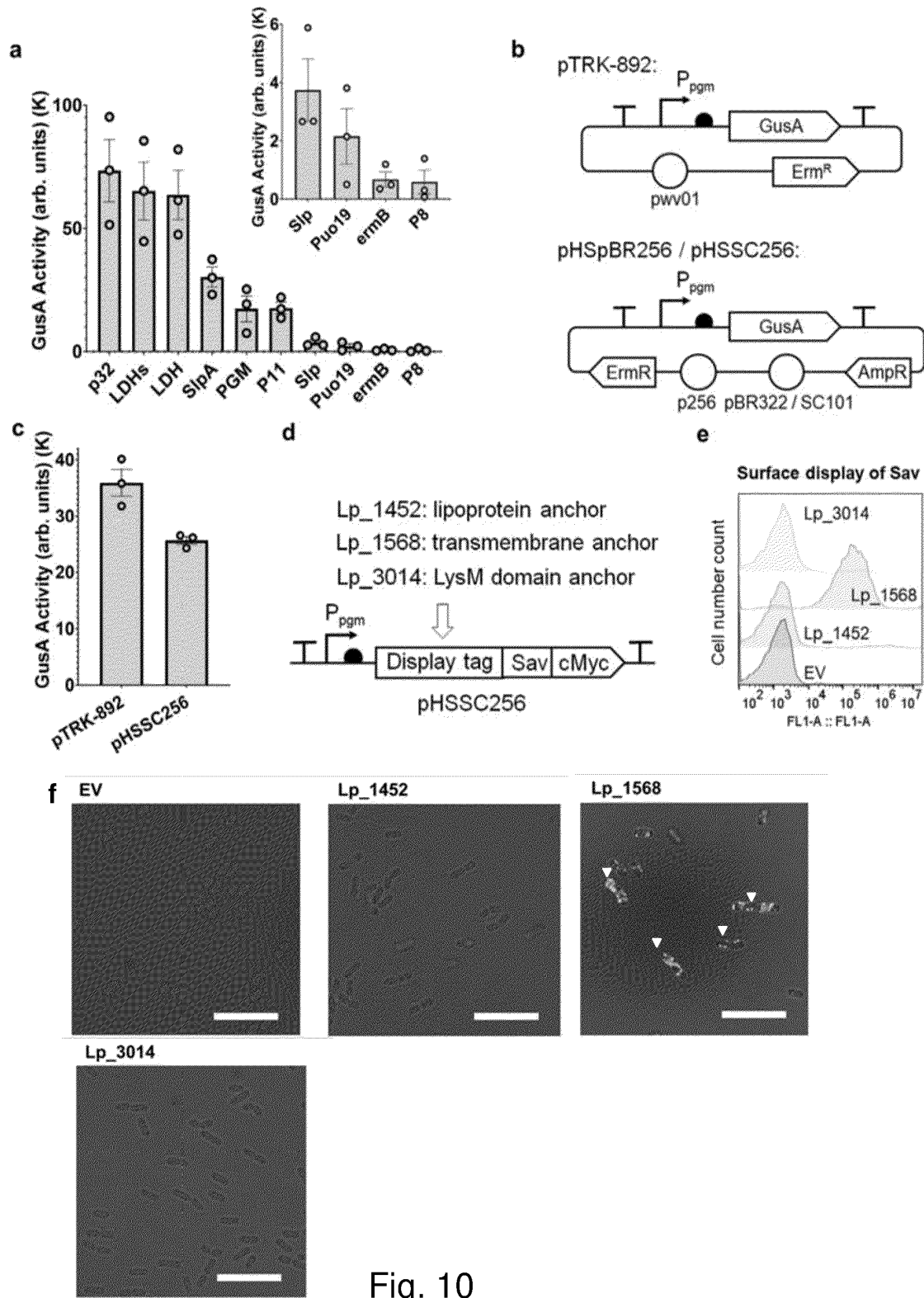


Fig. 10

1	10	20	30	40	50	60	70	80	90	100	110	120	130	
Lp_0018:	HKRUISSIAIYALGLVLTCGSSQSS	-----QOKTLNVYATQ-----SIATADPMAKADIASQARAFHEGLVTYNNQKGVYPAIAIKYKVPINNGKTYTIFNL RHNAKUSNGKVTARDFVYS	HD	-----QOKTLNVYATQ-----SIATADPMAKADIASQARAFHEGLVTYNNQKGVYPAIAIKYKVPINNGKTYTIFNL RHNAKUSNGKVTARDFVYS	HD	-----QOKTLNVYATQ-----SIATADPMAKADIASQARAFHEGLVTYNNQKGVYPAIAIKYKVPINNGKTYTIFNL RHNAKUSNGKVTARDFVYS	HD	-----QOKTLNVYATQ-----SIATADPMAKADIASQARAFHEGLVTYNNQKGVYPAIAIKYKVPINNGKTYTIFNL RHNAKUSNGKVTARDFVYS	HD	-----QOKTLNVYATQ-----SIATADPMAKADIASQARAFHEGLVTYNNQKGVYPAIAIKYKVPINNGKTYTIFNL RHNAKUSNGKVTARDFVYS	HD	-----QOKTLNVYATQ-----SIATADPMAKADIASQARAFHEGLVTYNNQKGVYPAIAIKYKVPINNGKTYTIFNL RHNAKUSNGKVTARDFVYS	HD	-----QOKTLNVYATQ-----SIATADPMAKADIASQARAFHEGLVTYNNQKGVYPAIAIKYKVPINNGKTYTIFNL RHNAKUSNGKVTARDFVYS
Lp_3686:	MSL	SGTHKLILITGSVYITGEGITVNAHSHQ	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS
Lp_0092:	MSL	SGTHKLILITGSVYITGEGITVNAHSHQ	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS
Lp_0200:	MSL	SGTHKLILITGSVYITGEGITVNAHSHQ	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS
Lp_0201:	MSL	SGTHKLILITGSVYITGEGITVNAHSHQ	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS
Lp_1261:	MSL	SGTHKLILITGSVYITGEGITVNAHSHQ	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS
Lp_1261:	MSL	SGTHKLILITGSVYITGEGITVNAHSHQ	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS
Lp_0783:	MSL	SGTHKLILITGSVYITGEGITVNAHSHQ	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS
Consensus	MSL	SGTHKLILITGSVYITGEGITVNAHSHQ	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS	-----TKTKGSQVNL	SGSS
131	140	150	160	170	180	190	200	210	220	230	240	250	260	
Lp_0018:	VQKQVDPNTKSGEYVHAEIKNATATATAGKAVKTLGVKALGKYLQITL	QKQVYVNYR	LA	-----TEIYPL	NKQD	TEKYKNGYGT	SHQRT	SLNGP	YVLKSHNGT	NQDTHKYVKNPYYVYDQKQVRIKNIKQVTV	-----	-----	-----	
Lp_3686:	VQKQVDPNTKSGEYVHAEIKNATATATAGKAVKTLGVKALGKYLQITL	QKQVYVNYR	LA	-----TEIYPL	NKQD	TEKYKNGYGT	SHQRT	SLNGP	YVLKSHNGT	NQDTHKYVKNPYYVYDQKQVRIKNIKQVTV	-----	-----	-----	
Lp_0092:	VQKQVDPNTKSGEYVHAEIKNATATATAGKAVKTLGVKALGKYLQITL	QKQVYVNYR	LA	-----TEIYPL	NKQD	TEKYKNGYGT	SHQRT	SLNGP	YVLKSHNGT	NQDTHKYVKNPYYVYDQKQVRIKNIKQVTV	-----	-----	-----	
Lp_0200:	VQKQVDPNTKSGEYVHAEIKNATATATAGKAVKTLGVKALGKYLQITL	QKQVYVNYR	LA	-----TEIYPL	NKQD	TEKYKNGYGT	SHQRT	SLNGP	YVLKSHNGT	NQDTHKYVKNPYYVYDQKQVRIKNIKQVTV	-----	-----	-----	
Lp_0201:	VQKQVDPNTKSGEYVHAEIKNATATATAGKAVKTLGVKALGKYLQITL	QKQVYVNYR	LA	-----TEIYPL	NKQD	TEKYKNGYGT	SHQRT	SLNGP	YVLKSHNGT	NQDTHKYVKNPYYVYDQKQVRIKNIKQVTV	-----	-----	-----	
Lp_1261:	VQKQVDPNTKSGEYVHAEIKNATATATAGKAVKTLGVKALGKYLQITL	QKQVYVNYR	LA	-----TEIYPL	NKQD	TEKYKNGYGT	SHQRT	SLNGP	YVLKSHNGT	NQDTHKYVKNPYYVYDQKQVRIKNIKQVTV	-----	-----	-----	
Lp_1261:	VQKQVDPNTKSGEYVHAEIKNATATATAGKAVKTLGVKALGKYLQITL	QKQVYVNYR	LA	-----TEIYPL	NKQD	TEKYKNGYGT	SHQRT	SLNGP	YVLKSHNGT	NQDTHKYVKNPYYVYDQKQVRIKNIKQVTV	-----	-----	-----	
Lp_0783:	VQKQVDPNTKSGEYVHAEIKNATATATAGKAVKTLGVKALGKYLQITL	QKQVYVNYR	LA	-----TEIYPL	NKQD	TEKYKNGYGT	SHQRT	SLNGP	YVLKSHNGT	NQDTHKYVKNPYYVYDQKQVRIKNIKQVTV	-----	-----	-----	
Consensus	VQKQVDPNTKSGEYVHAEIKNATATATAGKAVKTLGVKALGKYLQITL	QKQVYVNYR	LA	-----TEIYPL	NKQD	TEKYKNGYGT	SHQRT	SLNGP	YVLKSHNGT	NQDTHKYVKNPYYVYDQKQVRIKNIKQVTV	-----	-----	-----	
261	270	280	290	300	310	320	330	340	350	360	370	380	390	
Lp_0018:	KNNSTRENLFOSNEVQVITGTOVSAREQSLKSNQKVTYKLNQ	YCHL	LNQK	-----SALQNTOL	PRAYSV	YAL	NRQSL	YK	NYVL	KDGS	VAATSL	VPAGNT	KNPTTGKDFNTD	
Lp_3686:	KNNSTRENLFOSNEVQVITGTOVSAREQSLKSNQKVTYKLNQ	YCHL	LNQK	-----SALQNTOL	PRAYSV	YAL	NRQSL	YK	NYVL	KDGS	VAATSL	VPAGNT	KNPTTGKDFNTD	
Lp_0092:	KNNSTRENLFOSNEVQVITGTOVSAREQSLKSNQKVTYKLNQ	YCHL	LNQK	-----SALQNTOL	PRAYSV	YAL	NRQSL	YK	NYVL	KDGS	VAATSL	VPAGNT	KNPTTGKDFNTD	
Lp_0200:	KNNSTRENLFOSNEVQVITGTOVSAREQSLKSNQKVTYKLNQ	YCHL	LNQK	-----SALQNTOL	PRAYSV	YAL	NRQSL	YK	NYVL	KDGS	VAATSL	VPAGNT	KNPTTGKDFNTD	
Lp_0201:	KNNSTRENLFOSNEVQVITGTOVSAREQSLKSNQKVTYKLNQ	YCHL	LNQK	-----SALQNTOL	PRAYSV	YAL	NRQSL	YK	NYVL	KDGS	VAATSL	VPAGNT	KNPTTGKDFNTD	
Lp_1261:	KNNSTRENLFOSNEVQVITGTOVSAREQSLKSNQKVTYKLNQ	YCHL	LNQK	-----SALQNTOL	PRAYSV	YAL	NRQSL	YK	NYVL	KDGS	VAATSL	VPAGNT	KNPTTGKDFNTD	
Lp_1261:	KNNSTRENLFOSNEVQVITGTOVSAREQSLKSNQKVTYKLNQ	YCHL	LNQK	-----SALQNTOL	PRAYSV	YAL	NRQSL	YK	NYVL	KDGS	VAATSL	VPAGNT	KNPTTGKDFNTD	
Lp_0783:	KNNSTRENLFOSNEVQVITGTOVSAREQSLKSNQKVTYKLNQ	YCHL	LNQK	-----SALQNTOL	PRAYSV	YAL	NRQSL	YK	NYVL	KDGS	VAATSL	VPAGNT	KNPTTGKDFNTD	
Consensus	KNNSTRENLFOSNEVQVITGTOVSAREQSLKSNQKVTYKLNQ	YCHL	LNQK	-----SALQNTOL	PRAYSV	YAL	NRQSL	YK	NYVL	KDGS	VAATSL	VPAGNT	KNPTTGKDFNTD	
391	400	410	420	430	440	450	460	470	480	490	500	510	520	
Lp_0018:	YHQKQASL	GKQKLTQL	LL	THND	INKSV	AEY	YQARIEKN	SGVT	YVNV	KSVP	LT	THE	ISTLS	
Lp_3686:	YHQKQASL	GKQKLTQL	LL	THND	INKSV	AEY	YQARIEKN	SGVT	YVNV	KSVP	LT	THE	ISTLS	
Lp_0092:	YHQKQASL	GKQKLTQL	LL	THND	INKSV	AEY	YQARIEKN	SGVT	YVNV	KSVP	LT	THE	ISTLS	
Lp_0200:	YHQKQASL	GKQKLTQL	LL	THND	INKSV	AEY	YQARIEKN	SGVT	YVNV	KSVP	LT	THE	ISTLS	
Lp_0201:	YHQKQASL	GKQKLTQL	LL	THND	INKSV	AEY	YQARIEKN	SGVT	YVNV	KSVP	LT	THE	ISTLS	
Lp_1261:	YHQKQASL	GKQKLTQL	LL	THND	INKSV	AEY	YQARIEKN	SGVT	YVNV	KSVP	LT	THE	ISTLS	
Lp_1261:	YHQKQASL	GKQKLTQL	LL	THND	INKSV	AEY	YQARIEKN	SGVT	YVNV	KSVP	LT	THE	ISTLS	
Lp_0783:	YHQKQASL	GKQKLTQL	LL	THND	INKSV	AEY	YQARIEKN	SGVT	YVNV	KSVP	LT	THE	ISTLS	
Consensus	YHQKQASL	GKQKLTQL	LL	THND	INKSV	AEY	YQARIEKN	SGVT	YVNV	KSVP	LT	THE	ISTLS	
521	530	540	550	560	570	574								
Lp_0018:	VHQQGVTP	YVOTARAL	TSNKVGGV	HTLLR	-----DAL	YRYAY	KEQKLT	ISEEDL	-----	-----	-----	-----	-----	
Lp_3686:	VHQQGVTP	YVOTARAL	TSNKVGGV	HTLLR	-----DAL	YRYAY	KEQKLT	ISEEDL	-----	-----	-----	-----	-----	
Lp_0092:	VHQQGVTP	YVOTARAL	TSNKVGGV	HTLLR	-----DAL	YRYAY	KEQKLT	ISEEDL	-----	-----	-----	-----	-----	
Lp_0200:	VHQQGVTP	YVOTARAL	TSNKVGGV	HTLLR	-----DAL	YRYAY	KEQKLT	ISEEDL	-----	-----	-----	-----	-----	
Lp_0201:	VHQQGVTP	YVOTARAL	TSNKVGGV	HTLLR	-----DAL	YRYAY	KEQKLT	ISEEDL	-----	-----	-----	-----	-----	
Lp_1261:	VHQQGVTP	YVOTARAL	TSNKVGGV	HTLLR	-----DAL	YRYAY	KEQKLT	ISEEDL	-----	-----	-----	-----	-----	
Lp_1261:	VHQQGVTP	YVOTARAL	TSNKVGGV	HTLLR	-----DAL	YRYAY	KEQKLT	ISEEDL	-----	-----	-----	-----	-----	
Lp_0783:	VHQQGVTP	YVOTARAL	TSNKVGGV	HTLLR	-----DAL	YRYAY	KEQKLT	ISEEDL	-----	-----	-----	-----	-----	
Consensus	VHQQGVTP	YVOTARAL	TSNKVGGV	HTLLR	-----DAL	YRYAY	KEQKLT	ISEEDL	-----	-----	-----	-----	-----	

Fig. 11