

Computational analysis of *Linum usitatissimum*-derived peptides: Toward therapeutic applications

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Supplementary Table

Table 1 — General properties of peptides and toxicity prediction

Peptide ID	Peptide sequence	Toxicity prediction		General properties									
		SVM Score	Prediction	Hydrophobicity	Steric hindrance	Sidebulk	Hydrophobicity	Amphiphaticity	Hydrophilicity	Net Hydrogen	Charge	pI	Molwt
seq1	WF	-0.8	Non-Toxin	0.33	0.4	0.4	0.63	0	-1.97	0.33	0	5.88	498.61
seq2	PF	-0.8	Non-Toxin	0.18	0.35	0.35	0.4	0	-0.83	0	0	5.88	409.51
seq3	WL	-0.8	Non-Toxin	0.3	0.34	0.34	0.97	0	-1.73	0.33	0	5.88	430.59
seq4	AF	-0.8	Non-Toxin	0.29	0.41	0.41	1.53	0	-1	0	0	5.88	383.47
seq5	DF	-0.8	Non-Toxin	-0.04	0.49	0.49	-0.23	0	0.17	0.33	-1	3.8	427.48
seq6	TCF	-0.83	Non-Toxin	0.12	0.46	0.46	1.15	0	-0.97	0.25	0	5.85	516.65
seq7	CL	-0.8	Non-Toxin	0.19	0.38	0.38	2.1	0	-0.93	0	0	5.85	347.51
seq8	GL	-0.8	Non-Toxin	0.23	0.4	0.4	1.13	0	-0.6	0	0	5.88	301.43
seq9	PR	-0.8	Non-Toxin	-0.61	0.35	0.35	-2.03	0.82	1	1.33	1	10.1	427.53
seq10	GR	-0.79	Non-Toxin	-0.53	0.45	0.45	-1.63	0.82	1	1.33	1	10.1	387.47
seq11	IHF	-0.82	Non-Toxin	0.23	0.35	0.35	1.02	0.36	-1.2	0.25	0.5	7.1	562.72
seq12	IPL	-0.79	Non-Toxin	0.3	0.4	0.4	1.67	0	-0.9	0	0	5.88	454.67
seq13	QNAF	-0.84	Non-Toxin	-0.09	0.53	0.53	-0.48	0.25	-0.52	0.8	0	5.88	625.74
seq14	IWSVYEF	-0.73	Non-Toxin	0.17	0.56	0.56	0.62	0.16	-1.02	0.5	-1	4	1090.35
seq15	MMADTCL	-0.49	Non-Toxin	0.06	0.57	0.57	0.96	0	-0.41	0.25	-1	3.8	897.24
seq16	IF	-0.8	Non-Toxin	0.45	0.47	0.47	2.43	0	-1.43	0	0	5.88	425.56
seq17	GGMQIF	-1.01	Non-Toxin	0.18	0.6	0.6	0.7	0.18	-0.77	0.29	0	5.88	799.06
seq18	VLGGMQIF	-1.33	Non-Toxin	0.26	0.61	0.61	1.43	0.14	-0.97	0.22	0	5.88	1011.39
seq19	GGYF	-0.71	Non-Toxin	0.19	0.55	0.55	0.14	0	-0.96	0.2	0	5.88	589.71
seq20	SF	-0.8	Non-Toxin	0.12	0.41	0.41	0.67	0	-0.73	0.33	0	5.88	399.47
seq21	GPL	-0.79	Non-Toxin	0.15	0.39	0.39	0.45	0	-0.45	0	0	5.88	398.56
seq22	CR	-0.8	Non-Toxin	-0.57	0.43	0.43	-0.67	0.82	0.67	1.33	1	8.6	433.55
seq23	MGR	-0.8	Non-Toxin	-0.33	0.54	0.54	-0.75	0.61	0.42	1	1	10.1	518.68
seq24	TMYF	-0.68	Non-Toxin	0.14	0.54	0.54	0.54	0	-1.3	0.4	0	5.88	707.9
seq25	MIYL	-0.96	Non-Toxin	0.31	0.54	0.54	1.78	0	-1.44	0.2	0	5.88	651.94
seq26	GMDPAR	-1	Non-Toxin	-0.27	0.54	0.54	-0.9	0.35	0.6	0.71	0	6.19	802
seq27	YHIYYEGCL	-0.69	Non-Toxin	0.05	0.53	0.53	-0.02	0.27	-0.9	0.5	-0.5	5.25	1273.62

seq28	MGDAL	-0.89	Non-Toxin	0.08	0.54	0.54	0.6	0	-0.1	0.17	-1	3.8	618.83
seq29	SSQDF	-1.07	Non-Toxin	-0.22	0.53	0.53	-0.97	0.21	0.22	0.83	-1	3.8	729.81
seq30	TNF	-0.83	Non-Toxin	-0.05	0.5	0.5	-0.35	0	-0.68	0.75	0	5.88	527.62
seq31	IPSEF	-0.76	Non-Toxin	0.06	0.49	0.49	0.23	0.21	-0.17	0.33	-1	4	738.91
seq32	GF	-0.8	Non-Toxin	0.26	0.46	0.46	0.8	0	-0.83	0	0	5.88	369.45
seq33	SWIF	-0.76	Non-Toxin	0.29	0.49	0.49	1.12	0	-1.48	0.4	0	5.88	698.88
seq34	CWQPQ DF	-1.29	Non-Toxin	-0.14	0.54	0.54	-0.96	0.31	-0.44	0.75	-1	3.8	1070.29
seq35	WK	-0.79	Non-Toxin	-0.24	0.39	0.39	-1.6	1.22	-0.13	1	1	9.11	460.61
seq36	PDDYF	-0.72	Non-Toxin	-0.15	0.55	0.55	-1.18	0	0.2	0.5	-2	3.57	802.9
seq37	TF	-0.8	Non-Toxin	0.14	0.41	0.41	0.7	0	-0.97	0.33	0	5.88	413.5
seq38	TPWAI WTR	-0.57	Non-Toxin	-0.05	0.48	0.48	-0.33	0.27	-0.77	0.89	1	10.1	1186.5 1
seq39	SVPF	-0.91	Non-Toxin	0.16	0.46	0.46	0.92	0	-0.74	0.2	0	5.88	595.75
seq40	ADMMR	-0.91	Non-Toxin	-0.28	0.59	0.59	-0.4	0.41	0.48	0.83	0	6.19	779.01
seq41	NNF	-0.84	Non-Toxin	-0.17	0.55	0.55	-1.05	0	-0.53	1	0	5.88	540.62
seq42	MAL	-0.84	Non-Toxin	0.26	0.46	0.46	1.88	0	-0.9	0	0	5.88	446.66
seq43	GAYAS DPF	-0.77	Non-Toxin	0.03	0.53	0.53	-0.13	0	-0.28	0.33	-1	3.8	974.14
seq44	AQDF	-0.92	Non-Toxin	-0.11	0.53	0.53	-0.48	0.25	0.04	0.6	-1	3.8	626.72
seq45	SPR	-0.8	Non-Toxin	-0.52	0.39	0.39	-1.73	0.61	0.82	1.25	1	10.1	514.62 1
seq46	ATF	-0.81	Non-Toxin	0.17	0.44	0.44	0.97	0	-0.85	0.25	0	5.88	484.59
seq47	VCGL	-0.85	Non-Toxin	0.25	0.51	0.51	2.02	0	-0.86	0	0	5.85	503.73
seq48	EF	-0.8	Non-Toxin	0	0.46	0.46	-0.23	0.42	0.17	0.33	-1	4	441.51
seq49	PAR	-0.82	Non-Toxin	-0.4	0.39	0.39	-1.07	0.61	0.62	1	1	10.1	498.62 1
seq50	HAPTGS WEIF	-1.12	Non-Toxin	0.05	0.47	0.47	-0.18	0.25	-0.53	0.45	-0.5	5.25	1291.58
seq51	ISMPAH L	-1.12	Non-Toxin	0.13	0.43	0.43	0.8	0.18	-0.7	0.25	0.5	7.1	881.22
seq52	YL	-0.8	Non-Toxin	0.18	0.41	0.41	0.83	0	-1.37	0.33	0	5.88	407.55
seq53	DYADIL	-0.88	Non-Toxin	0.01	0.57	0.57	0.26	0	-0.06	0.43	-2	3.57	822.02
seq54	CPGK	-0.81	Non-Toxin	-0.19	0.47	0.47	-0.68	0.73	0.4	0.4	1	8.57	531.73
seq55	NAWPE L	-0.77	Non-Toxin	-0.03	0.48	0.48	-0.56	0.18	-0.36	0.57	-1	4	842.06
seq56	CDR	-0.8	Non-Toxin	-0.61	0.52	0.52	-1.38	0.61	1.25	1.25	0	6.16	548.65
seq57	NSWGG F	-0.86	Non-Toxin	0.06	0.55	0.55	-0.46	0	-0.77	0.57	0	5.88	813.96
seq58	ANMPP GPF	-0.7	Non-Toxin	0.05	0.5	0.5	-0.24	0	-0.46	0.22	0	5.88	977.26
seq59	NF	-0.8	Non-Toxin	-0.01	0.49	0.49	-0.23	0	-0.77	0.67	0	5.88	426.5
seq60	GYQPF	-0.92	Non-Toxin	0	0.52	0.52	-0.67	0.21	-0.77	0.5	0	5.88	757.92
seq61	PPL	-0.8	Non-Toxin	0.1	0.31	0.31	0.15	0	-0.45	0	0	5.88	438.62
seq62	DYF	-0.79	Non-Toxin	-0.02	0.54	0.54	-0.5	0	-0.45	0.5	-1	3.8	590.67
seq63	WIGR	-0.83	Non-Toxin	-0.1	0.51	0.51	-0.26	0.49	-0.44	1	1	10.1	686.88 1
seq64	AVCF	-0.88	Non-Toxin	0.29	0.51	0.51	2.26	0	-1.1	0	0	5.85	585.77
seq65	AAF	-0.85	Non-Toxin	0.28	0.43	0.43	1.6	0	-0.88	0	0	5.88	454.56
seq66	WVL	-0.79	Non-Toxin	0.36	0.43	0.43	1.77	0	-1.68	0.25	0	5.88	529.74
seq67	PNTF	-0.84	Non-Toxin	-0.06	0.47	0.47	-0.6	0	-0.54	0.6	0	5.88	624.75
seq68	YDSF	-0.75	Non-Toxin	-0.07	0.54	0.54	-0.56	0	-0.3	0.6	-1	3.8	677.76
seq69	QIPGDY GL	-0.57	Non-Toxin	0.01	0.57	0.57	-0.27	0.14	-0.3	0.44	-1	3.8	975.25
seq70	APIL	-0.84	Non-Toxin	0.29	0.42	0.42	1.7	0	-0.82	0	0	5.88	525.76

seq71	AGL	-0.8	Non-Toxin	0.24	0.43	0.43	1.3	0	-0.57	0	0	5.88	372.52
seq72	STF	-0.83	Non-Toxin	0.04	0.44	0.44	0.32	0	-0.65	0.5	0	5.88	500.59
seq73	PIDTPL	-0.96	Non-Toxin	0.03	0.46	0.46	0.13	0	-0.14	0.29	-1	3.8	768.02
seq74	YEF	-0.81	Non-Toxin	0	0.52	0.52	-0.5	0.32	-0.45	0.5	-1	4	604.7
seq75	SSSF	-0.8	Non-Toxin	-0.03	0.46	0.46	0.08	0	-0.32	0.6	0	5.88	573.65
seq76	PSL	-0.8	Non-Toxin	0.05	0.35	0.35	0.35	0	-0.38	0.25	0	5.88	428.58
seq77	DYVIPE F	-0.8	Non-Toxin	0.06	0.58	0.58	0.2	0.16	-0.26	0.38	-2	3.67	1029.26
seq78	SCAF	-0.83	Non-Toxin	0.13	0.47	0.47	1.26	0	-0.74	0.2	0	5.85	573.71
seq79	ML	-0.8	Non-Toxin	0.26	0.44	0.44	1.9	0	-1.03	0	0	5.88	375.57
seq80	PGL	-0.78	Non-Toxin	0.15	0.39	0.39	0.45	0	-0.45	0	0	5.88	398.56
seq81	PPPHGS IL	-0.67	Non-Toxin	0.06	0.39	0.39	-0.1	0.16	-0.42	0.22	0.5	7.1	930.25
seq82	AIML	-0.87	Non-Toxin	0.35	0.51	0.51	2.4	0	-1.08	0	0	5.88	559.84
seq83	MAPTQ F	-1.12	Non-Toxin	0.03	0.51	0.51	0.1	0.18	-0.64	0.43	0	5.88	841.08
seq84	PVSF	-0.9	Non-Toxin	0.16	0.46	0.46	0.92	0	-0.74	0.2	0	5.88	595.75
seq85	CQPGF	-0.83	Non-Toxin	0.01	0.51	0.51	-0.03	0.21	-0.55	0.33	0	5.85	697.88
seq86	AGYF	-0.79	Non-Toxin	0.21	0.52	0.52	0.58	0	-1.06	0.2	0	5.88	603.73
seq87	GGL	-0.77	Non-Toxin	0.21	0.47	0.47	0.75	0	-0.45	0	0	5.88	358.5
seq88	MAAGF	-1.03	Non-Toxin	0.26	0.53	0.53	1.32	0	-0.8	0	0	5.88	642.84
seq89	AMMK	-0.81	Non-Toxin	-0.07	0.55	0.55	0.34	0.73	-0.02	0.4	1	9.11	607.89
seq90	PPK	-0.73	Non-Toxin	-0.31	0.35	0.35	-1.77	0.92	0.75	0.5	1	9.11	468.64
seq91	PSEF	-0.84	Non-Toxin	-0.07	0.45	0.45	-0.62	0.25	0.16	0.4	-1	4	625.73
seq92	HMGSL	-0.82	Non-Toxin	0.05	0.42	0.42	0.22	0.24	-0.55	0.33	0.5	7.1	656.89
seq93	MIDDP	-0.96	Non-Toxin	-0.33	0.58	0.58	-0.96	0.35	0.84	0.86	-1	4.21	902.12
seq94	WPF	-0.81	Non-Toxin	0.23	0.39	0.39	0.07	0	-1.48	0.25	0	5.88	595.74
seq95	GPF	-0.79	Non-Toxin	0.17	0.43	0.43	0.2	0	-0.62	0	0	5.88	466.58
seq96	HNPF	-0.8	Non-Toxin	-0.1	0.36	0.36	-1.1	0.29	-0.56	0.6	0.5	7.1	660.79
seq97	PL	-0.8	Non-Toxin	0.15	0.3	0.3	0.73	0	-0.6	0	0	5.88	341.49
seq98	HYCGL	-0.65	Non-Toxin	0.06	0.42	0.42	0.23	0.24	-0.93	0.33	0.5	7.06	704.93
seq99	MYR	-0.79	Non-Toxin	-0.37	0.54	0.54	-0.98	0.61	-0.15	1.25	1	9.1	624.8
seq100	GPVAII TPF	-1.2	Non-Toxin	0.27	0.53	0.53	1.35	0	-0.85	0.1	0	5.88	1061.43
seq101	AGHML	-1	Non-Toxin	0.13	0.42	0.42	0.65	0.24	-0.68	0.17	0.5	7.1	640.89
seq102	NGEPF	-0.89	Non-Toxin	-0.09	0.53	0.53	-1.03	0.21	0.12	0.5	-1	4	709.83
seq103	GPDVN EADYV AWVCD QDAYA CSGQK	-0.55	Non-Toxin	-0.14	0.62	0.62	-0.53	0.29	0.09	0.65	-4	3.72	2833.41
seq104	MGAL	-0.84	Non-Toxin	0.24	0.5	0.5	1.42	0	-0.72	0	0	5.88	503.73
seq105	GPAGD PR	-0.58	Non-Toxin	-0.26	0.51	0.51	-1.27	0.31	0.69	0.62	0	6.19	824.99
seq106	GSSHF	-0.76	Non-Toxin	-0.03	0.41	0.41	-0.4	0.24	-0.4	0.5	0.5	7.1	680.79
seq107	VWSCH R	-0.72	Non-Toxin	-0.21	0.43	0.43	-0.39	0.56	-0.44	1	1.5	8.61	943.18
seq108	DWK	-0.78	Non-Toxin	-0.36	0.48	0.48	-2.08	0.92	0.65	1	0	6.19	575.71
seq109	PMVL	-0.73	Non-Toxin	0.25	0.47	0.47	1.66	0	-0.92	0	0	5.88	571.85
seq110	CPK	-0.8	Non-Toxin	-0.28	0.42	0.42	-0.75	0.92	0.5	0.5	1	8.57	474.66
seq111	GQSQN GF	-0.8	Non-Toxin	-0.17	0.59	0.59	-1.16	0.31	-0.2	0.88	0	5.88	884.03
seq112	HGL	-0.83	Non-Toxin	0.07	0.3	0.3	0.05	0.36	-0.57	0.25	0.5	7.1	438.59
seq113	WCL	-0.69	Non-Toxin	0.23	0.41	0.41	1.35	0	-1.55	0.25	0	5.85	533.74
seq114	DCCCF	-0.25	Non-Toxin	0	0.55	0.55	1.13	0	-0.42	0.17	-1	3.8	736.93

seq115	WR	-0.8	Non-Toxin	-0.46	0.39	0.39	-1.8	0.82	-0.13	1.67	1	10.1	516.63
												1	
seq116	DGF	-0.82	Non-Toxin	0.01	0.53	0.53	-0.28	0	0.12	0.25	-1	3.8	484.55
seq117	PIF	-0.81	Non-Toxin	0.32	0.44	0.44	1.42	0	-1.07	0	0	5.88	522.69
seq118	PML	-0.81	Non-Toxin	0.18	0.42	0.42	1.02	0	-0.78	0	0	5.88	472.7
seq119	GML	-0.82	Non-Toxin	0.24	0.5	0.5	1.32	0	-0.78	0	0	5.88	432.64
seq120	SDCWR	-0.49	Non-Toxin	-0.39	0.52	0.52	-1.2	0.41	0.32	1.17	0	6.16	821.97
seq121	PWK	-0.71	Non-Toxin	-0.2	0.39	0.39	-1.6	0.92	-0.1	0.75	1	9.11	557.74
seq122	PPR	-0.73	Non-Toxin	-0.47	0.35	0.35	-1.93	0.61	0.75	1	1	10.1	524.66
												1	
seq123	DIACF	-0.72	Non-Toxin	0.15	0.55	0.55	1.35	0	-0.47	0.17	-1	3.8	714.9
seq124	ISSCF	-0.85	Non-Toxin	0.14	0.51	0.51	1.37	0	-0.78	0.33	0	5.85	702.89
seq125	HAF	-0.82	Non-Toxin	0.11	0.3	0.3	0.35	0.36	-0.88	0.25	0.5	7.1	520.63
seq126	DCPR	-0.86	Non-Toxin	-0.5	0.48	0.48	-1.42	0.49	1	1	0	6.16	645.78
seq127	SECF	-0.68	Non-Toxin	-0.05	0.51	0.51	0.2	0.25	-0.04	0.4	-1	4	631.75
seq128	ISF	-0.81	Non-Toxin	0.27	0.48	0.48	1.62	0	-1	0.25	0	5.88	512.65
seq129	AISIPW GVK	-1.2	Non-Toxin	0.14	0.54	0.54	0.74	0.37	-0.57	0.4	1	9.11	1098.5
seq130	GWHIG K	-1.02	Non-Toxin	-0.01	0.46	0.46	-0.61	0.73	-0.39	0.57	1.5	9.11	825.09
seq131	YGR	-0.78	Non-Toxin	-0.4	0.52	0.52	-1.55	0.61	0.18	1.25	1	9.1	550.66
seq132	NWGTN L	-0.84	Non-Toxin	-0.06	0.54	0.54	-0.74	0	-0.74	0.86	0	5.88	817.02
seq133	DMGR	-0.74	Non-Toxin	-0.41	0.58	0.58	-1.3	0.49	0.94	1	0	6.19	633.78
seq134	SMR	-0.83	Non-Toxin	-0.44	0.5	0.5	-0.85	0.61	0.5	1.25	1	10.1	548.7
												1	
seq135	GGDL	-0.79	Non-Toxin	0.03	0.53	0.53	-0.1	0	0.24	0.2	-1	3.8	473.6
seq136	ISGGTF	-0.87	Non-Toxin	0.17	0.55	0.55	0.71	0	-0.63	0.29	0	5.88	727.91
seq137	DMPPA SPSEDE SSVWW K	-0.75	Non-Toxin	-0.18	0.54	0.54	-1.1	0.34	0.34	0.67	-3	3.92	2076.5
seq138	MSYL	-0.88	Non-Toxin	0.11	0.51	0.51	0.72	0	-1.02	0.4	0	5.88	625.85
seq139	TGDF	-0.87	Non-Toxin	-0.03	0.53	0.53	-0.36	0	0.02	0.4	-1	3.8	585.67
seq140	ITWPDQ PYR	-1.07	Non-Toxin	-0.24	0.53	0.53	-1.31	0.37	-0.17	1	0	6.19	1331.63
seq141	EHSHT ADDWG GWR	-0.89	Non-Toxin	-0.2	0.5	0.5	-1.28	0.44	0.12	0.87	-1	5.22	1823.13
seq142	HMMK	-0.81	Non-Toxin	-0.2	0.45	0.45	-0.66	1.02	-0.02	0.6	1.5	9.11	673.96
seq143	WPDQQ QL	-0.95	Non-Toxin	-0.24	0.52	0.52	-1.59	0.47	-0.2	1	-1	3.8	1027.27
seq144	DIGGCP DL	-0.56	Non-Toxin	0.01	0.57	0.57	0.16	0	0.16	0.22	-2	3.57	902.16
seq145	IYQCTE PTWL	-1	Non-Toxin	0	0.53	0.53	-0.13	0.23	-0.72	0.64	-1	4	1366.76
seq146	PNL	-0.78	Non-Toxin	-0.04	0.41	0.41	-0.32	0	-0.4	0.5	0	5.88	455.61
seq147	TDF	-0.83	Non-Toxin	-0.07	0.5	0.5	-0.35	0	0.03	0.5	-1	3.8	528.6
seq148	IPNL	-0.71	Non-Toxin	0.11	0.47	0.47	0.64	0	-0.68	0.4	0	5.88	568.79
seq149	QGL	-0.8	Non-Toxin	0	0.47	0.47	-0.03	0.31	-0.4	0.5	0	5.88	429.58
seq150	DGL	-0.8	Non-Toxin	-0.01	0.49	0.49	-0.03	0	0.3	0.25	-1	3.8	416.53
seq151	HGEDD PPL	-0.64	Non-Toxin	-0.21	0.46	0.46	-1.5	0.3	0.74	0.44	-2.5	4.03	992.18
seq152	GW	-0.8	Non-Toxin	0.18	0.39	0.39	-0.43	0	-1.13	0.33	0	5.88	447.53
seq153	GGM	-0.77	Non-Toxin	0.15	0.54	0.54	0.27	0	-0.33	0	0	5.88	394.56
seq154	QIF	-0.8	Non-Toxin	0.16	0.52	0.52	0.95	0.31	-1.02	0.5	0	5.88	553.71

seq155	AW	-0.8	Non-Toxin	0.21	0.34	0.34	0.3	0	-1.3	0.33	0	5.88	461.55
seq156	VW	-0.8	Non-Toxin	0.3	0.4	0.4	1.1	0	-1.63	0.33	0	5.88	489.61
seq157	PGM	-0.79	Non-Toxin	0.09	0.46	0.46	-0.03	0	-0.33	0	0	5.88	434.62
seq158	CA	-0.8	Non-Toxin	0.1	0.38	0.38	1.43	0	-0.5	0	0	5.85	263.33
seq159	AAGF	-0.93	Non-Toxin	0.25	0.48	0.48	1.2	0	-0.7	0	0	5.88	511.63
seq160	PSGSF	-0.98	Non-Toxin	0.04	0.56	0.56	-0.16	0	-0.38	0.4	0	5.88	493.57