

Supplemental Table 1 Library of synthetic *C. elegans* FLP and NLP peptides.

Gene	Peptide sequence	Gene	Peptide sequence
<i>nlp-1</i>	MDANAFRMSFamide	<i>nlp-28</i>	GYGGYGGYamide
	MDPNAFRMSFamide	<i>nlp-30</i>	pQWGYGGYamide
<i>nlp-2</i>	SIALGRSGFRPamide		GYGGYamide
	SMAMGRLGLRPamide		GMWamide
	SMAYGRQGFRPamide		PYGGYGWamide
<i>nlp-3</i>	AINPFLDSMamide	<i>nlp-32</i>	YGGWGamide
	AVNPFLDSIamide		GYGamide
	YFDSLQSLamide		GGGWamide
<i>nlp-5</i>	SVSQLNQYAGFDTLGGMGLamide		GGGamide
	ALSFDLGGMGLamide		FGYGGamide
	ALQHFSSLDLGGMGFamide	<i>nlp-35</i>	AVVSGYDNIYQVLAPRF
<i>nlp-6</i>	MAAPKQMYFGFamide	<i>nlp-36</i>	SMVARQIPQTVVADH
	APKQMVFGFamide	<i>nlp-37 (pdf-2)</i>	NNAEVVNHILKNFGALDRLGDVamide
	AAMRSFNMGFamide	<i>nlp-38</i>	SPAQWQRANGLWamide
<i>nlp-7</i>	pQADFDDPRMFTSSFamide		TPQNWNKLNSLWamide
	LYLKQADFDDPRMFTSSFamide		ASDDRVLGWNKAHGLWamide
	SMDLDDPRLMTMSFamide		VLGWNKAHGLWamide
<i>nlp-8</i>	AFDRFDNSGVFSFGA	<i>nlp-39</i>	EVPNFQADNVPEAGGRV
	AFDRMDNSDFFGA	<i>nlp-40</i>	APSAPAGLEEKL
	SFDRMGGTEFGLM	<i>nlp-41</i>	APGLFELPSRSVRLI
<i>nlp-9</i>	GGARAFYGFYNAGNS		
	GGGRAFNHNANLFRFD	<i>pdf-1a</i>	SNAELINGLIGMDLGKLSAVamide
	GGGRAFAGSWSPYLE	<i>pdf-1b</i>	SNAELINGLLSMNLNKLGAamide
<i>nlp-10</i>	AIPFNGGMYamide	<i>pdf-1</i> linkingpeptide	SPLLYRAPQMYDDVQFV
	STMPFSGGMYamide	<i>pdf-1</i> linkingpeptide'	SPLLYRAPQYQMYDDVQFV
	AAIPFSGGMYamide		
	GAMPFSGGMYamide	<i>flp-1</i>	SADPNFLRFamide
<i>nlp-11</i>	HISPSYDVEIDAGNMRNLLDIamide		AAADPNFLRFamide
	SAPMASDYGNQFQMYNRLIDAamide		PNFLRFamide
	SPAISPAYQFENAFGLSEALERAamide		KPNFMRYamide
<i>nlp-12</i>	DYRPLQFamide	<i>flp-2</i>	SPREPIRFamide

	DGYRPLQFamide	<i>flp-3</i>	SPLGTMRamide
<i>nlp-13</i>	NDFSRDIMamide		TPLGTMRamide
	pQPSYDRDIMamide		EAEPLGTMRamide
	SSSMYDRDIMamide		NPLGTMRamide
	SPVDYDRPIMamide		ASEDALFGTMRamide
<i>nlp-14</i>	ALDGLDGSFGFD		EDGNAPFGTMRamide
	ALNSLDGAGFGFE		SAEPFGTMRamide
	ALDGLDGSFGFD		SADDSAPFGTMRamide
	ALNSLDGNGFGFD		NPENDTPFGTMRamide
<i>nlp-15</i>	AFDSLGSFGDNGFN	<i>flp-4</i>	PTFIRamide
	AFDSLGSFGAFN		ASPSFIRamide
	AFDSLGSFGSGFD	<i>flp-5</i>	GAKFIRamide
	AFDSLGSFGFTGFE	<i>flp-6</i>	KSAYMRamide
	AFDTVSTSGFDDFKL	<i>flp-7</i>	SPMQRSSMVRamide
<i>nlp-16</i>	STEHHRV		TPMQRSSMVRamide
	SEGHPHE		SPMERSAMVRamide
	ATHSPEGHIVAKDDHHGHE		SPMDRSKMVRamide
	SVDEHHGHQ	<i>flp-9</i>	KPSFVRamide
	NAEDHHEHQ	<i>flp-10</i>	QPKARSGYIRamide
	SEHVEHQAEMHEHQ	<i>flp-11</i>	AMRNALVRamide
	STQEVSGHPEHHLV		ASGGMRNALVRamide
<i>nlp-17</i>	GSLSNMMRIamide		NGAPQPFVRamide
<i>nlp-18</i>	ARYGFA		SPLDEEDFAPESPLamide
	ASPYGFAFA	<i>flp-12</i>	RNKFEFIRamide
<i>nlp-19</i>	IGLRLPNFL	<i>flp-13</i>	SDRPTRAMDSPLIRamide
	IGLRLPNML		AADGAPLIRamide
	MGMRLPNIFL		APEASPLIRamide
<i>nlp-20</i>	FAFAFA		ASPSAPLIRamide
	APKEFARFARASFA		SPSAVPLIRamide
<i>nlp-21</i>	GGARAMLH		ASSAPLIRamide
	GGARAFSADVGDDY		SAAAPLIRamide
	GGARAFLTEM		AMDSPLIRamide
	GGARVFQGFED	<i>flp-14</i>	KHEYLIRamide
	GGARAFMMD		HEYLIRamide

	GGGRAFGDMM	<i>flp-15</i>	GGPQGPLRFamide
	GGGRSFPVKPGRLLD		RGPSGPLRFamide
<i>nlp-22</i>	SIAIGRAGFRPamide		GPSGPLRFamide
<i>nlp-23</i>	LYISRQGFRPA	<i>flp-16</i>	AQTFVRFamide
	SMAIGRAGMRPamide	<i>flp-18</i>	DFDGAMPGVLRamide
	AFAAGWNRamide		SEVPGVLRamide
<i>nlp-24</i>	pQWGGGYPYGGYGP		DVPGVLRamide
	YGGYGamide	<i>flp-19</i>	WANQVRFamide
	FTGYPYGGYGamide	<i>flp-22</i>	SPSAKWRFamide
	GPYGGGGLVGALLamide	<i>flp-24</i>	VPSAGDMMVRFamide
<i>nlp-25</i>	pQWGGGYGNPYGGYamide	<i>flp-25</i>	DYDFVRFamide
<i>nlp-26</i>	pQFGFGGQSFamide	<i>flp-26</i>	EFNADDLTLRFamide
	GGFNGN		GGAGEPLAFSPDMLSLRFamide
	GGFGQSQFGamide		
	GGFGFamide		