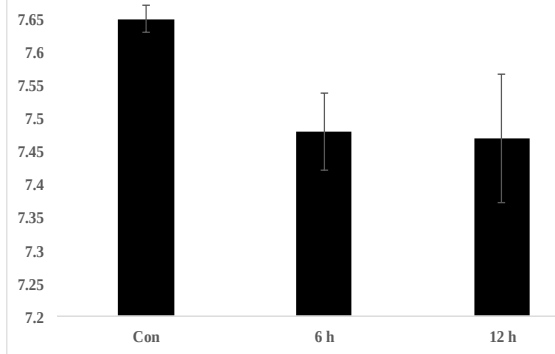
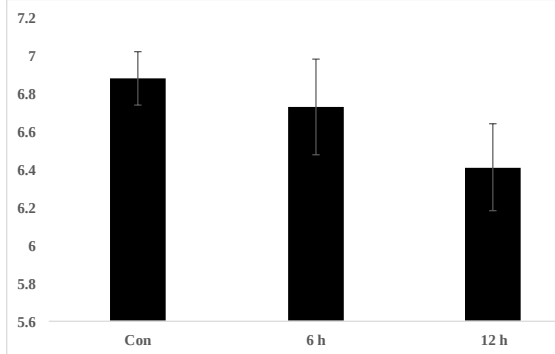
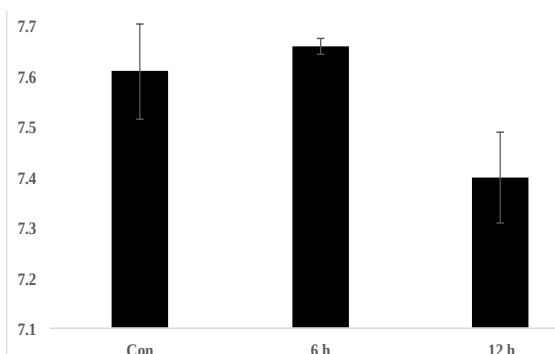
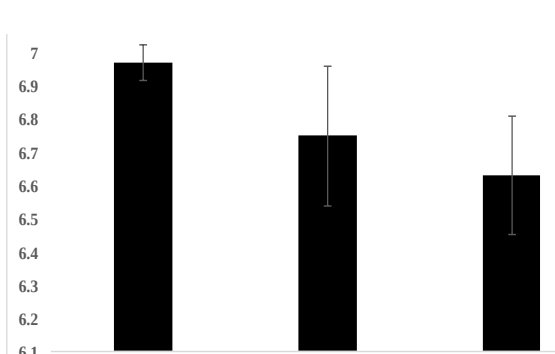
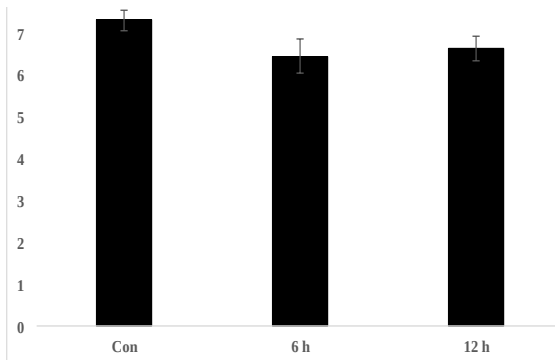
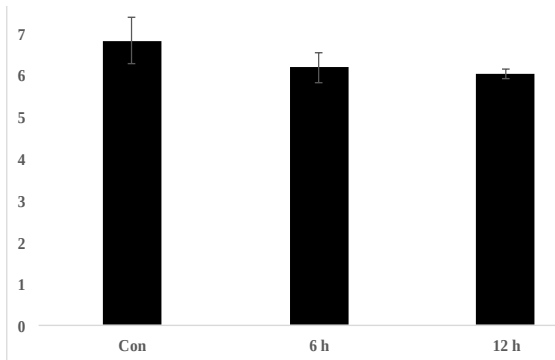
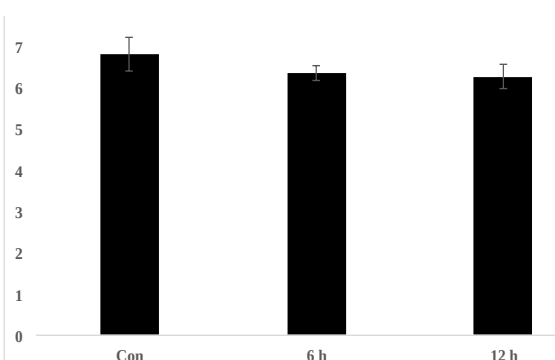
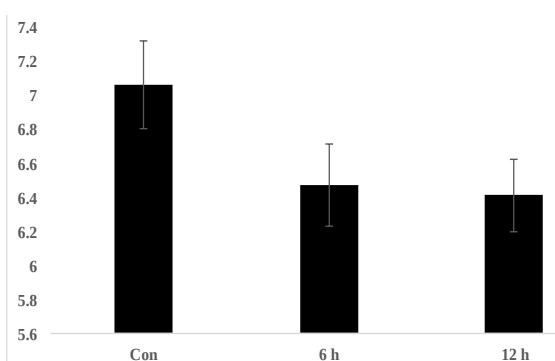


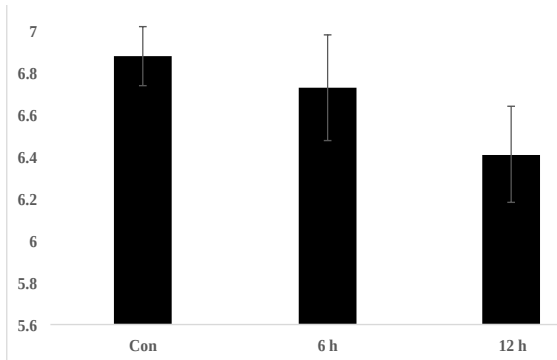
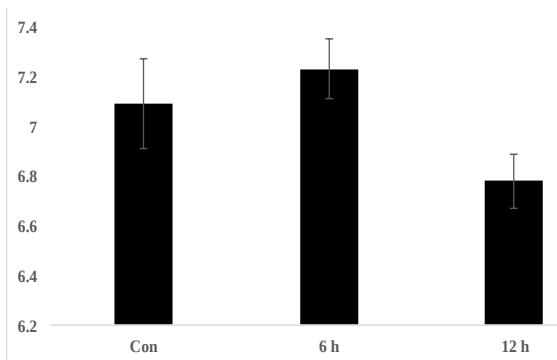
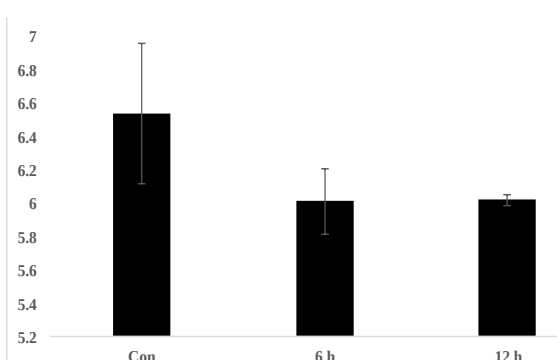
Supplementary Materials: Proteomic investigation to identify anticancer targets of *Nemopilema nomurai* jellyfish venom in human hepatocarcinoma HepG2 cell

Table S1. The proteins with declined relative abundance after NnV treatment. Proteins with ≥ 1.5 fold change and with statistically significance p value ≤ 0.05 were considered. Fold change and p value of individual candidate protein is mentioned.

Spot no	Accession no	Protein name	p value	Fold change	Relative spot intensity								
2277	PCNA_HUMAN	Proliferating cell nuclear antigen	0.034	1.9	<table><thead><tr><th>Condition</th><th>Relative spot intensity</th></tr></thead><tbody><tr><td>Con</td><td>8.1</td></tr><tr><td>6 h</td><td>7.95</td></tr><tr><td>12 h</td><td>7.8</td></tr></tbody></table>	Condition	Relative spot intensity	Con	8.1	6 h	7.95	12 h	7.8
Condition	Relative spot intensity												
Con	8.1												
6 h	7.95												
12 h	7.8												
1648	KIF28_HUMAN	Kinesin like protein KIF 28P	0.037	3.7	<table><thead><tr><th>Condition</th><th>Relative spot intensity</th></tr></thead><tbody><tr><td>Con</td><td>6.55</td></tr><tr><td>6 h</td><td>6.0</td></tr><tr><td>12 h</td><td>6.05</td></tr></tbody></table>	Condition	Relative spot intensity	Con	6.55	6 h	6.0	12 h	6.05
Condition	Relative spot intensity												
Con	6.55												
6 h	6.0												
12 h	6.05												
2299	GRP78_HUMAN	78 kDa glucose - regulated protein	0.032	3.3	<table><thead><tr><th>Condition</th><th>Relative spot intensity</th></tr></thead><tbody><tr><td>Con</td><td>7.3</td></tr><tr><td>6 h</td><td>7.5</td></tr><tr><td>12 h</td><td>7.0</td></tr></tbody></table>	Condition	Relative spot intensity	Con	7.3	6 h	7.5	12 h	7.0
Condition	Relative spot intensity												
Con	7.3												
6 h	7.5												
12 h	7.0												

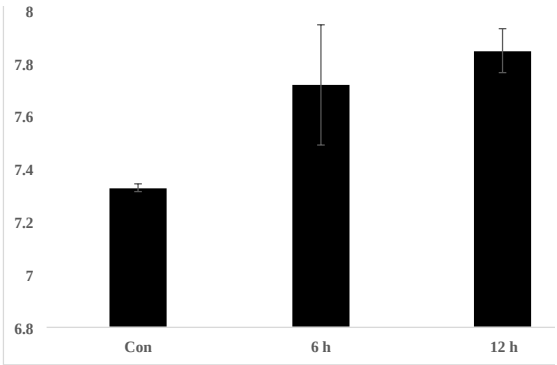
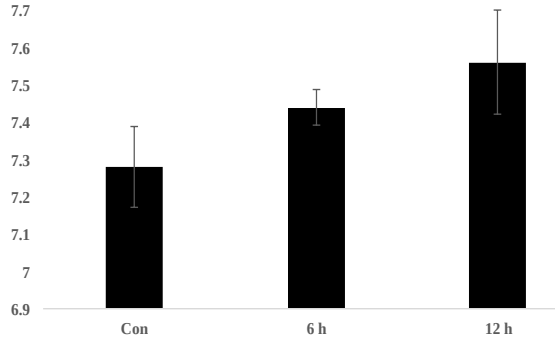
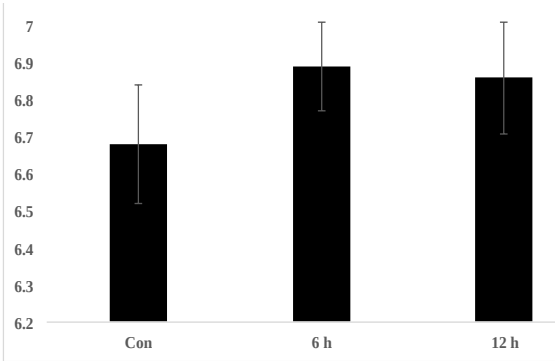
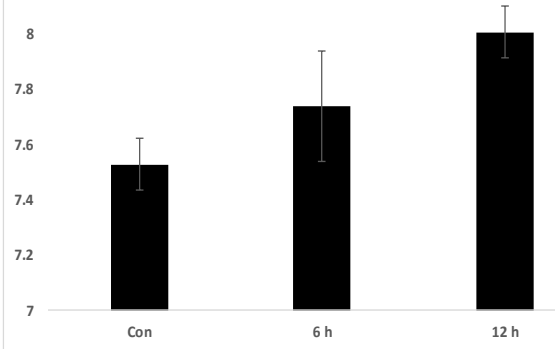
2008	AHSA1_H UMAN	Activator of 90kDa heat shock protein ATPase homolog 1	0.016	1.5	 <table><thead><tr><th>Condition</th><th>Value</th></tr></thead><tbody><tr><td>Con</td><td>7.64</td></tr><tr><td>6 h</td><td>7.48</td></tr><tr><td>12 h</td><td>7.47</td></tr></tbody></table>	Condition	Value	Con	7.64	6 h	7.48	12 h	7.47
Condition	Value												
Con	7.64												
6 h	7.48												
12 h	7.47												
2245	NDUF7_H UMAN	NADH dehydrogenase [ubiquinone] complex1,assembly factor 7	0.029	2.9	 <table><thead><tr><th>Condition</th><th>Value</th></tr></thead><tbody><tr><td>Con</td><td>6.88</td></tr><tr><td>6 h</td><td>6.72</td></tr><tr><td>12 h</td><td>6.42</td></tr></tbody></table>	Condition	Value	Con	6.88	6 h	6.72	12 h	6.42
Condition	Value												
Con	6.88												
6 h	6.72												
12 h	6.42												
1768	NUSAP_H UMAN	Nucleolar and spindle-associated protein 1	0.024	1.8	 <table><thead><tr><th>Condition</th><th>Value</th></tr></thead><tbody><tr><td>Con</td><td>7.62</td></tr><tr><td>6 h</td><td>7.66</td></tr><tr><td>12 h</td><td>7.40</td></tr></tbody></table>	Condition	Value	Con	7.62	6 h	7.66	12 h	7.40
Condition	Value												
Con	7.62												
6 h	7.66												
12 h	7.40												
1978	DNM1L_H UMAN	Dynamin-1-like protein	0.015	2.2	 <table><thead><tr><th>Condition</th><th>Value</th></tr></thead><tbody><tr><td>Con</td><td>6.97</td></tr><tr><td>6 h</td><td>6.75</td></tr><tr><td>12 h</td><td>6.63</td></tr></tbody></table>	Condition	Value	Con	6.97	6 h	6.75	12 h	6.63
Condition	Value												
Con	6.97												
6 h	6.75												
12 h	6.63												

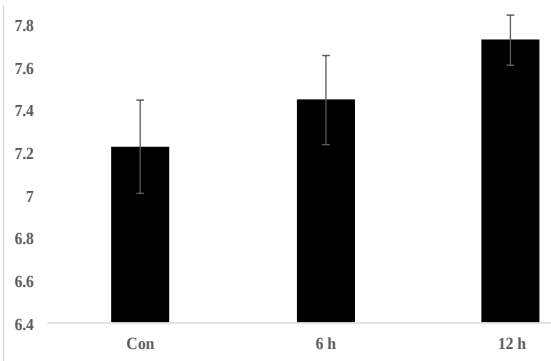
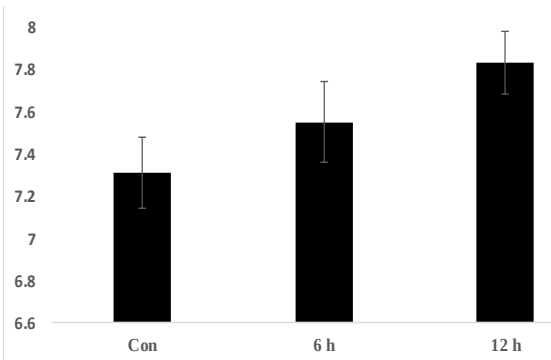
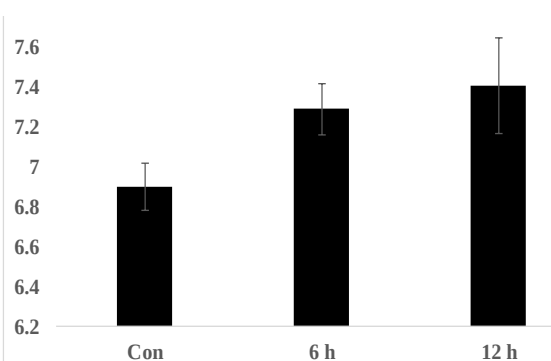
2183	ATLA3_H UMAN	Atlastin-3	0.029	6.8	 <table><tr><th>Condition</th><th>Relative Expression</th></tr><tr><td>Con</td><td>~7.2</td></tr><tr><td>6 h</td><td>~6.5</td></tr><tr><td>12 h</td><td>~6.7</td></tr></table>	Condition	Relative Expression	Con	~7.2	6 h	~6.5	12 h	~6.7
Condition	Relative Expression												
Con	~7.2												
6 h	~6.5												
12 h	~6.7												
1772	HNRH1_H UMAN	Heterogeneous nuclear ribonucleo protein H	0.042	7.5	 <table><tr><th>Condition</th><th>Relative Expression</th></tr><tr><td>Con</td><td>~6.8</td></tr><tr><td>6 h</td><td>~6.2</td></tr><tr><td>12 h</td><td>~6.1</td></tr></table>	Condition	Relative Expression	Con	~6.8	6 h	~6.2	12 h	~6.1
Condition	Relative Expression												
Con	~6.8												
6 h	~6.2												
12 h	~6.1												
1817	EF1G_HU MAN	Elongation factor 1- gamma	0.041	3.8	 <table><tr><th>Condition</th><th>Relative Expression</th></tr><tr><td>Con</td><td>~6.8</td></tr><tr><td>6 h</td><td>~6.3</td></tr><tr><td>12 h</td><td>~6.2</td></tr></table>	Condition	Relative Expression	Con	~6.8	6 h	~6.3	12 h	~6.2
Condition	Relative Expression												
Con	~6.8												
6 h	~6.3												
12 h	~6.2												
1665	G6PD_HU MAN	Glucose-6- phosphate 1- dehydrogenase	0.002	4.5	 <table><tr><th>Condition</th><th>Relative Expression</th></tr><tr><td>Con</td><td>~7.05</td></tr><tr><td>6 h</td><td>~6.48</td></tr><tr><td>12 h</td><td>~6.42</td></tr></table>	Condition	Relative Expression	Con	~7.05	6 h	~6.48	12 h	~6.42
Condition	Relative Expression												
Con	~7.05												
6 h	~6.48												
12 h	~6.42												

2245	ATP23_HUMAN	Mitochondrial inner membrane protease ATP23 homolog	0.028	2.9	 <table><tr><th>Condition</th><th>Value</th></tr><tr><td>Con</td><td>6.9</td></tr><tr><td>6 h</td><td>6.7</td></tr><tr><td>12 h</td><td>6.4</td></tr></table>	Condition	Value	Con	6.9	6 h	6.7	12 h	6.4
Condition	Value												
Con	6.9												
6 h	6.7												
12 h	6.4												
2089	DNM3A_HUMAN	DNA (Cytosine-5)-methyl transferase 3A	0.017	2.8	 <table><tr><th>Condition</th><th>Value</th></tr><tr><td>Con</td><td>7.1</td></tr><tr><td>6 h</td><td>7.2</td></tr><tr><td>12 h</td><td>6.8</td></tr></table>	Condition	Value	Con	7.1	6 h	7.2	12 h	6.8
Condition	Value												
Con	7.1												
6 h	7.2												
12 h	6.8												
1648	TYW1_HUMAN	S-adenosyl-L-methionine dependent tRNA 4-demethyl wyosine synthase	0.037	3.7	 <table><tr><th>Condition</th><th>Value</th></tr><tr><td>Con</td><td>6.5</td></tr><tr><td>6 h</td><td>6.0</td></tr><tr><td>12 h</td><td>6.0</td></tr></table>	Condition	Value	Con	6.5	6 h	6.0	12 h	6.0
Condition	Value												
Con	6.5												
6 h	6.0												
12 h	6.0												

9 **Table S2.** The proteins with increased relative abundance after NnV treatment. Proteins with ≥ 1.5
10 fold change and with statistically significance p value ≤ 0.05 were considered. Fold change and p value
11 of individual candidate protein is mentioned.

Spot no	Accession no	Protein name	p value	Fold change	Relative spot intensity								
1646	CP21A_HUMAN	Steroid 21-hydroxylase	0.036	3.8	<table><thead><tr><th>Condition</th><th>Relative spot intensity</th></tr></thead><tbody><tr><td>Con</td><td>6.95</td></tr><tr><td>6 h</td><td>7.4</td></tr><tr><td>12 h</td><td>7.55</td></tr></tbody></table>	Condition	Relative spot intensity	Con	6.95	6 h	7.4	12 h	7.55
Condition	Relative spot intensity												
Con	6.95												
6 h	7.4												
12 h	7.55												
2353	AICDA_HUMAN	Single-stranded DNA cytosine deaminase	0.05	4.8	<table><thead><tr><th>Condition</th><th>Relative spot intensity</th></tr></thead><tbody><tr><td>Con</td><td>6.4</td></tr><tr><td>6 h</td><td>6.4</td></tr><tr><td>12 h</td><td>7.0</td></tr></tbody></table>	Condition	Relative spot intensity	Con	6.4	6 h	6.4	12 h	7.0
Condition	Relative spot intensity												
Con	6.4												
6 h	6.4												
12 h	7.0												
1906	UBP15_HUMAN	Ubiquitin carboxyl-terminal hydrolase 15	0.016	3.1	<table><thead><tr><th>Condition</th><th>Relative spot intensity</th></tr></thead><tbody><tr><td>Con</td><td>6.1</td></tr><tr><td>6 h</td><td>6.55</td></tr><tr><td>12 h</td><td>6.45</td></tr></tbody></table>	Condition	Relative spot intensity	Con	6.1	6 h	6.55	12 h	6.45
Condition	Relative spot intensity												
Con	6.1												
6 h	6.55												
12 h	6.45												

2029	PI4KA_HUMAN	Phosphatidylinositol 4-kinase alpha	0.035	3.4	 <table><tr><th>Condition</th><th>Value</th></tr><tr><td>Con</td><td>7.35</td></tr><tr><td>6 h</td><td>7.75</td></tr><tr><td>12 h</td><td>7.85</td></tr></table>	Condition	Value	Con	7.35	6 h	7.75	12 h	7.85
Condition	Value												
Con	7.35												
6 h	7.75												
12 h	7.85												
2014	SYHC_HUMAN	Histidine -t RNA Ligase	0.003	1.9	 <table><tr><th>Condition</th><th>Value</th></tr><tr><td>Con</td><td>7.28</td></tr><tr><td>6 h</td><td>7.45</td></tr><tr><td>12 h</td><td>7.55</td></tr></table>	Condition	Value	Con	7.28	6 h	7.45	12 h	7.55
Condition	Value												
Con	7.28												
6 h	7.45												
12 h	7.55												
821	DHB13_HUMAN	17-beta-hydroxysteroid dehydrogenase 13	0.017	1.6	 <table><tr><th>Condition</th><th>Value</th></tr><tr><td>Con</td><td>6.68</td></tr><tr><td>6 h</td><td>6.88</td></tr><tr><td>12 h</td><td>6.85</td></tr></table>	Condition	Value	Con	6.68	6 h	6.88	12 h	6.85
Condition	Value												
Con	6.68												
6 h	6.88												
12 h	6.85												
2841	SARM1_HUMAN	Sterile alpha and TIR motif- containing protein 1	0.02	3	 <table><tr><th>Condition</th><th>Value</th></tr><tr><td>Con</td><td>7.52</td></tr><tr><td>6 h</td><td>7.72</td></tr><tr><td>12 h</td><td>7.98</td></tr></table>	Condition	Value	Con	7.52	6 h	7.72	12 h	7.98
Condition	Value												
Con	7.52												
6 h	7.72												
12 h	7.98												

2282	ZSC31_HUMAN	Zinc finger and SCAN domain-containing protein 31	0.023	3.1	 <table><tr><th>Condition</th><th>Value</th></tr><tr><td>Con</td><td>7.23</td></tr><tr><td>6 h</td><td>7.45</td></tr><tr><td>12 h</td><td>7.72</td></tr></table>	Condition	Value	Con	7.23	6 h	7.45	12 h	7.72
Condition	Value												
Con	7.23												
6 h	7.45												
12 h	7.72												
2217	PAR3L_HUMAN	Partitioning defective 3 homolog B	0.047	3.3	 <table><tr><th>Condition</th><th>Value</th></tr><tr><td>Con</td><td>7.32</td></tr><tr><td>6 h</td><td>7.55</td></tr><tr><td>12 h</td><td>7.82</td></tr></table>	Condition	Value	Con	7.32	6 h	7.55	12 h	7.82
Condition	Value												
Con	7.32												
6 h	7.55												
12 h	7.82												
1378	GARL3_HUMAN	GTPase-activating Rap/Ran-GAP domain-like protein 3	0.019	3.3	 <table><tr><th>Condition</th><th>Value</th></tr><tr><td>Con</td><td>6.9</td></tr><tr><td>6 h</td><td>7.3</td></tr><tr><td>12 h</td><td>7.4</td></tr></table>	Condition	Value	Con	6.9	6 h	7.3	12 h	7.4
Condition	Value												
Con	6.9												
6 h	7.3												
12 h	7.4												