

Supplementary Materials: Metabolism of the Marine Phycotoxin PTX-2 and Its Effects on Hepatic Xenobiotic Metabolism: Activation of Nuclear Receptors and Modulation of the Phase I Cytochrome P450

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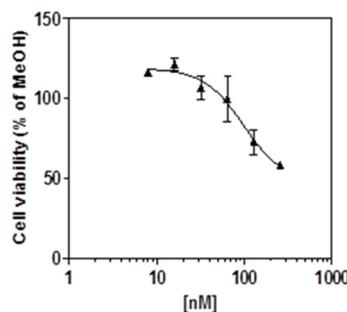


Figure S1. Cell viability in HepaRG cells. Following 24 h of treatment with different concentrations of PTX-2, the nuclei were stained with 1 µg/mL DAPI and scored using ArrayScan. The results were obtained from three independent experiments performed in triplicate (mean ± SD).

Table S1. Effects of PTX-2 on mRNA expression of CYP1A1, 1A2, 2B6, and SULT1E1 in HepaRG cells. The data represent the means of fold change compared to solvent control.

Gene	Assay	(nM)		
		16	32	64
CYP1A1	assay 1	2.7	4.7	5.5
	assay 2	2.8	4.9	6.7
	assay 3	7.2	20.6	43.8
CYP1A2	assay 1	4.7	5.0	8.2
	assay 2	3.7	9.1	13.9
	assay 3	4.8	10.7	4.3
CYP2B6	assay 1	1.1	1.9	1.9
	assay 2	2.2	5.6	6.4
	assay 3	1.4	2.0	2.1
SULT1E1	assay 1	1.3	1.7	7.4
	assay 2	0.8	0.8	1.1
	assay 3	3.1	4.6	2.2

Table S2. Summary of primers used for q-PCR analysis.

Gene	Sequence (5' to 3')	Gene	Sequence (5' to 3')
AHR	F: TAGGGTTTCAGCAGTCTGATGTC	SULT1E1	F: ACAGGATCAACTAACAGTGTACCA
	R: CTACTGTCTGGGGAGACCA		R: ATCTGGTCTTGCCTGGAACG
NR1I2	F: AGACACTGCAGGTGGCTTC	UGT1A1	F: CTGCCTTCACCAAATCCACTATC
	R: TGGGGAGAAGAGGGAGATGG		R: CACAGGACTGTCTGAGGGATT
CYP1A1	F: ACCCTGAAGGTGACAGTTCC	UGT1A9	F: CGGAGTATGATCTCTACAGCCAC
	R: TCTTGAGGTGGCTGAGGTA		R: TTCAAATTCCATAGGCAACGGC
CYP1A2	F: CTTCGCTACCTGCCAACCC	UGT2B4	F: GAAGTTCTAGGAAGACCCACTACG
	R: CCCGGACACTGTTCTTGTCA		R: GGGTGAGGAAATTGAAAATCCCAG
CYP2B6	F: TTCGGCGATTCTCTGTGACC	ABCB1	F: CAGCTGTGCTTGGTGCC
	R: ATGAGGGCCCCCTTGGAT		R: CCAATGTGTCGGCATTAGGC
CYP2C9	F: AAATGGAGAAGGAAAAGCACACC	ABCC2	F: GTGTGGATTCCCTTGGCCTT

	R: TCAACTGCAGTGTTCAGC		R: GAAGAAAACCAACGAATACCTGCTT
CYP2C19	F: CCTGGAACGCATGGTGGT R: TCCATTGCTGAAAACGATTCCAAT	ABCC3	F: CCAACTCAGTCAAACGTGCG R: ACCTAGGTCTGCCAGAGGA
CYP3A4	F: TCACAAACCGGAGGCCTTT R: TGGTGAAGGTTGGAGACAGC	ABCG2	F: AGTTCTCAGCAGCTCTCGG R: TTCCAACCCTGGAGTCTGCC
CYP3A5	F: GCCCAATAAGGCACCACCTA R: CCACCATTGACCCCTTGGGA	SLC22A1	F: TGTCAAATTGTTGGCGGGG R: TTAACCAGTGCAGGTAGGT
GSTM1	F: GGGGGACGCTCCTGATTATG R: GGGCAGATTGGGAAAGTCCA	SLC22A3	F: GCATTGCTAAGTGCAATGGGA R: GCCTGTGAACCAAGCAAACATAAG
NAT1	F: ACTAAGAAAGGGGATCATGGACATT R: ACAGCTCGGATCTGGTGTG	SLCO1A2	F: GCACAAGAGTATTGCTGGCAT R: CGGCAATCCGAGGTAGATGT
NAT2	F: ACAGACCTTGGAAAGCAAGAGG R: CTTCAATGTCCATGATCCCTTGG	SLCO1B1	F: TCCACATCATTTCAAGGGTCTACT R: TGCTTCATCCATGACACTTCCAT
SULT1A1	F: TCGGAGAAGTGTCCCTACGGAT R: CCACGAAGTCCACGGTCTC	GAPDH	F: GTCAAGGCTGAGAACGGGAA R: AAATGAGCCCCAGCCTTCTC