

2,3,7,8-Tetrachlorodibenzo-*p*-dioxin (TCDD) Dysregulates Hepatic One Carbon Metabolism During the Progression of Steatosis to Steatohepatitis with Fibrosis in Mice

Russell R. Fling^{1,3}, Claire M. Doskey^{2,3}, Kelly A. Fader^{2,3}, Rance Nault^{2,3}, Tim R. Zacharewski^{2,3}

¹Microbiology and Molecular Genetics, Michigan State University, East Lansing, MI 48824

²Biochemistry and Molecular Biology, Michigan State University, East Lansing, MI 48824

³Institute for Integrative Toxicology, Michigan State University, East Lansing, MI 48824

Russell Fling

E-mail: flingrus@msu.edu

Claire Doskey

E-mail: CDoskey@dow.com

Kelly Fader

E-mail: kelly.a.fader@gmail.com

Rance Nault

E-mail: flingrus@msu.edu

Timothy R. Zacharewski, Ph. D.*

Telephone: (517) 355-1607

E-mail: tzachare@msu.edu

Table S1. Forward and reverse primer sequences ((5' -> 3') used for qRT-PCR analysis.

Gene Symbol	Ref Seq Accession	Forward Primer	Reverse Primer	Amplicon Length (bp)	Expected Amplification Efficiency
<i>Ahcy</i>	NM_016661.3	ACCAGATGTCCCATCGCTTT	GCTCAGTGGGTAAAGACCGTT	166	< 1.50
<i>Bhmt</i>	NM_016668.3	GGCTAGGGAAGTCTAGCTGC	GGTGCCATCTTTCCGGTGTA	129	1.96
<i>Cbs</i>	NM_144855.3	ATCCAATCACGAGACCAGGC	GCAGTGACAACCCCAAACAC	104	>2.00
<i>Comt</i>	NM_001111062.1	TTCTGGCCCATAAATGCTGTTG	TGCACGAACTCAAACCAACC	120	<1.50
<i>Gamt</i>	NM_010255.4	TTATTAAGAATCATGCCTTCCGCT	AGGCACCTGCGTCTCCTC	134	<1.50
<i>Gapdh</i>	NM_008084.3	GTGGACCTCATGGCCTACAT	TGTGAGGGAGATGCTCAGTG	127	1.87
<i>Gatm</i>	NM_025961.5	TGAAGACAAGGCCACCCATC	TATTGGCCTTCACCTCCACTG	140	1.61
<i>Gnmt</i>	NM_010321.1	GAAGAGGGCTTCAGCGTGAT	GCACATCTTTGTCCAGCGTC	148	>2.00
<i>Inmt</i>	NM_009349.3	CCTTCTCTACAGGAGGTGTAGG	GTTCTGCGGGGTGTAGTCAG	128	>2.00
<i>Mat1a</i>	NM_133653.3	AGGAGCTGAAGGAAGTCCGA	GGGCAAAGAGGGAGATAGCG	196	1.98
<i>Mat2a</i>	NM_145569.5	CTGGGGTCATTGTCAGGGAT	CCTACGCCAACAAGTCTGGG	157	1.74
<i>Nnmt</i>	NM_001311062.1	AATCAAGCAGGAACCTGGGC	CAATGGTGTAAACCGGCCTCT	165	1.68
<i>Pemt</i>	NM_001290011.1	AATATCGACTTCAGGCAGGCT	GAATAGCAGGCTAGGTGGGG	197	< 1.50
<i>Sardh</i>	NM_138665.2	GGCACTGTTTGGACTTGACAG	AGGGCTCCTGTACCTTAGTCT	125	1.60