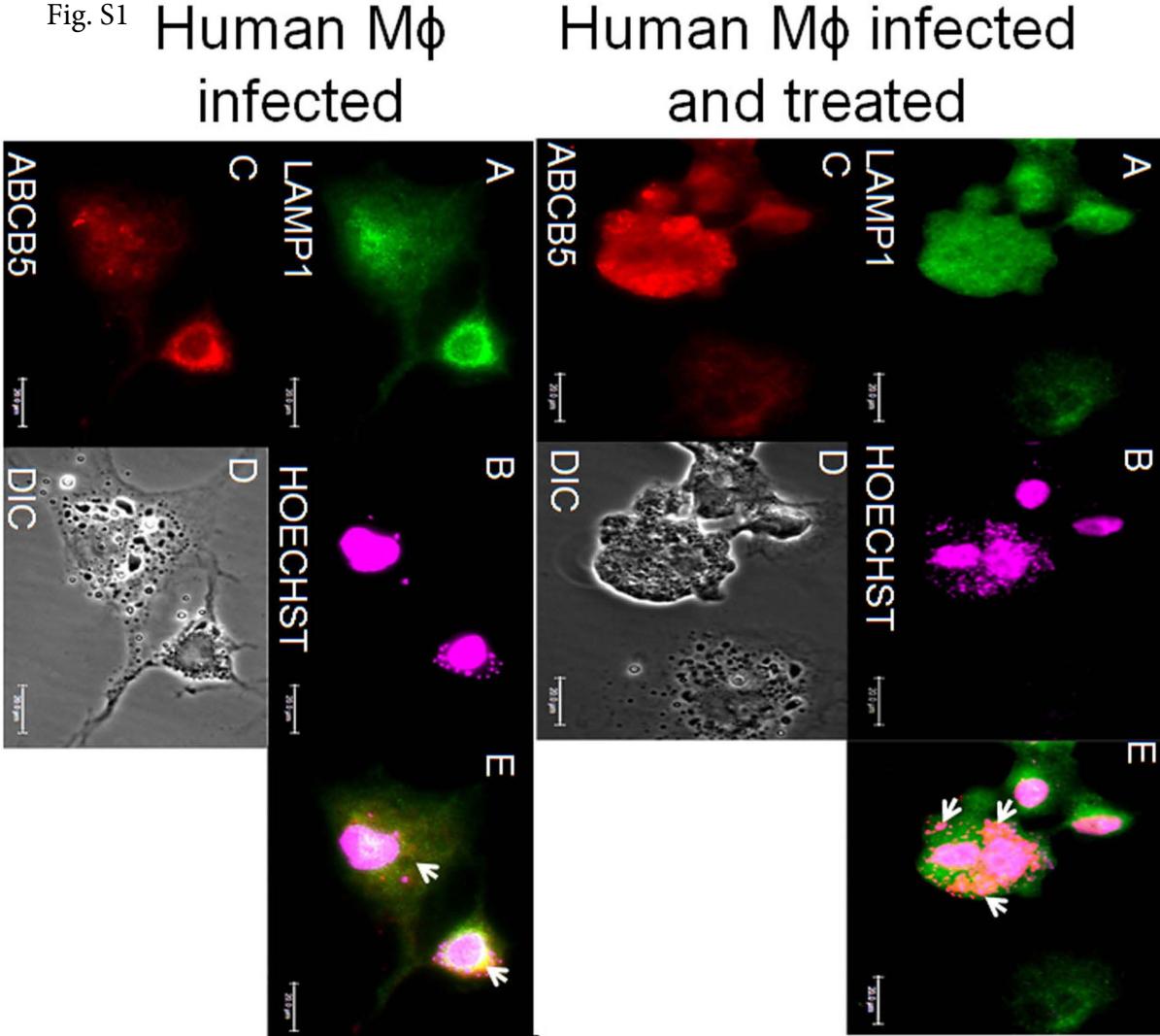


Fig. S1



**Supplementary FIG. S1. Immunolocalization of ABCB5 by confocal laser microscopy in human macrophages.** Human MDMs infected with *Leishmania braziliensis* (Upper panel); human MDMs infected with *L. braziliensis* and treated with Glucantime (Bottom panel); A. LAMP1, marker for lysosomes and late endosomes. B. Nuclei of macrophages and parasites were stained with Hoechst (violet). C. Subcellular localization of ABCB5 drug transporter, D. DIC: differential interference contrast images of human macrophages cells, E. Merged Hoechst and Lamp1 and ABCB5 images. White arrow indicates the subcellular localization of ABCB5 in phagolysosomal structures.

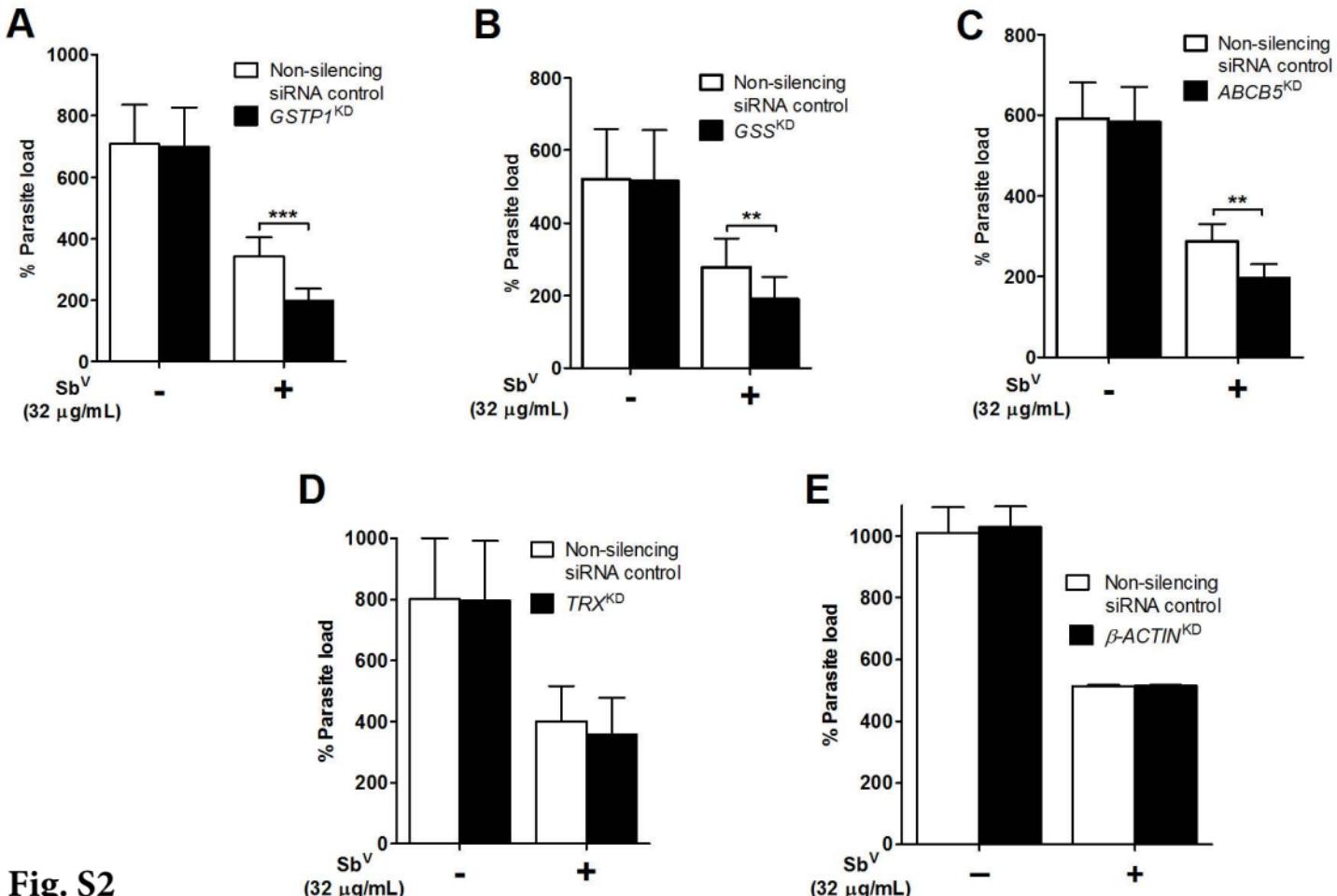
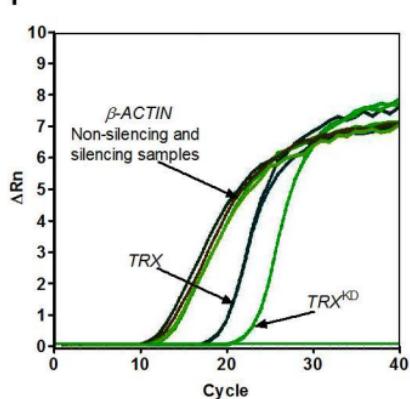
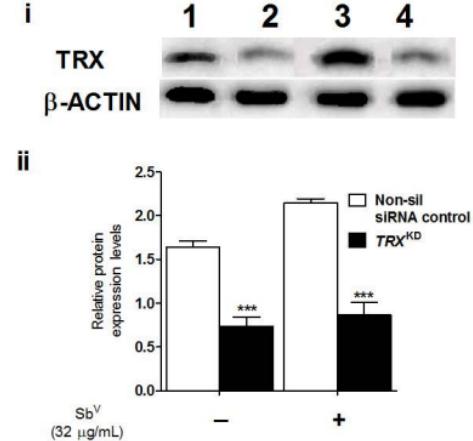
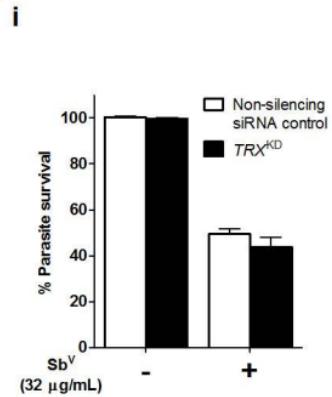


Fig. S2

**Supplementary FIG. S2. Silencing effect of *GSTP1*, *GSS*, *ABCB5*, *TRX* and  $\beta$ -*ACTIN* genes on intracellular *L. braziliensis* amastigote parasitic load in THP1 MΦ cells silenced and not silenced.** A = *GSTP1*, B = *GSS*, C = *ABCB5*, D = *TRX* and E =  $\beta$ -*ACTIN*. THP-1 MΦ cells were treated with Sb<sup>V</sup> (32 µg/mL); THP-1 MΦ cells infected and not treated were used as controls. The results represent the average of 2-3 independent experiments  $\pm$  SE. Significant differences were determined by two-way ANOVA, followed by multiple comparison test of Bonferroni, \*\*  $P < 0.01$  and \*\*\*  $P < 0.001$ .

**A****B****C**

ii       $Sb^V$   
(32  $\mu\text{g/mL}$ )

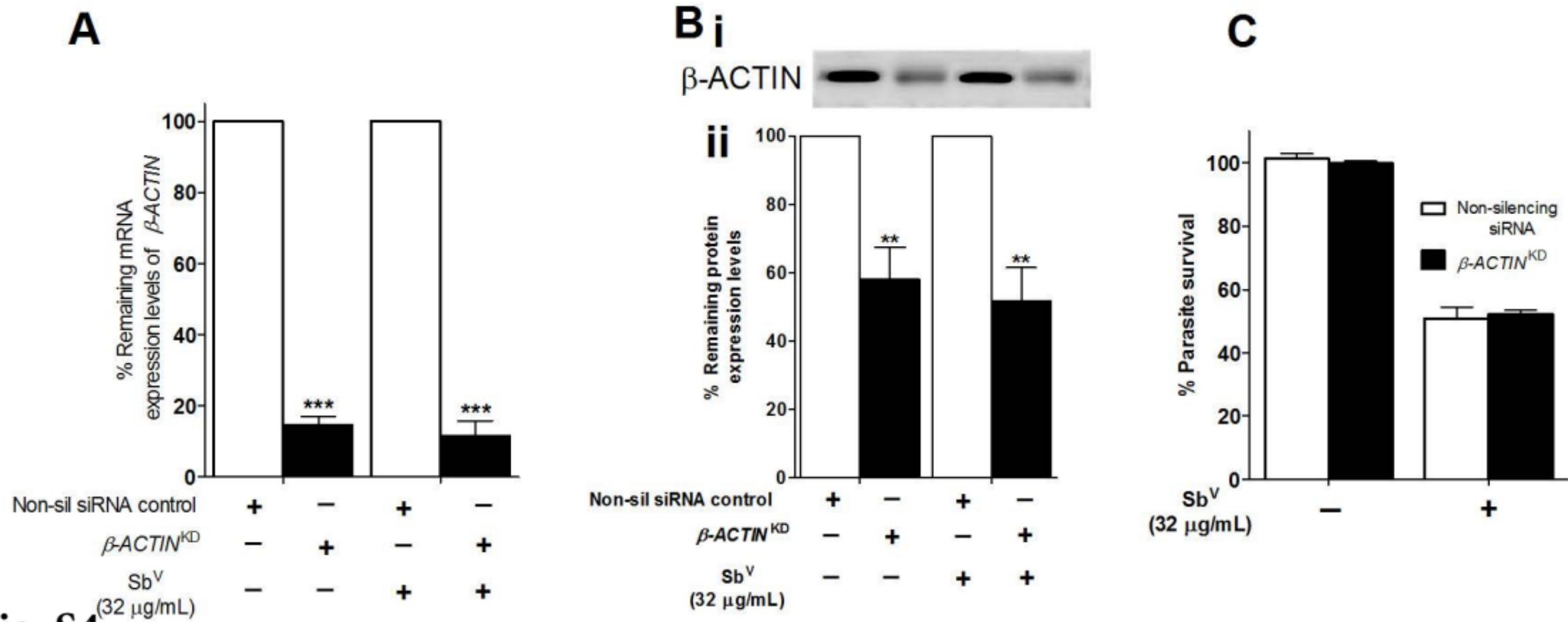
Non-sil  
siRNA control

$TRX^{KD}$

**Fig. S3**

**Supplementary FIG. S3. Silencing of the human *TRX* gene increased the intracellular susceptibility of *L. braziliensis* amastigotes to Sb<sup>V</sup> treatment in THP1 human MΦ cells.**

**A.** Efficacy of *TRX* gene silencing was determined at the mRNA expression level by real-time PCR analyses. (i) Representative amplification plot of *TRX* and  $\beta$ -*ACTIN* genes showing the  $\Delta R_n$  vs the cycles observed in the THP-1 MΦ cells infected with *L. braziliensis* and treated with Sb<sup>V</sup>. (ii) Percentage of the remaining levels of mRNA expression in the THP-1 MΦ infected and infected and treated groups (non-silencing siRNA negative control and silenced samples). **Bi.** Protein expression analyses by western blotting; equivalent protein loading was assessed by immunodetection of  $\beta$ -*ACTIN*. Line 1: THP-1 MΦ cells transfected with non-silencing siRNA negative control and infected. Line 2: THP-1 MΦ cells transfected with TRX siRNA ( $TRX^{KD}$ ) and infected. Line 3: THP-1 MΦ cells transfected with non-silencing siRNA, infected and treated with Sb<sup>V</sup> (32  $\mu$ g/mL). Line 4: THP-1 MΦ cells transfected with TRX siRNA ( $TRX^{KD}$ ), infected and treated with Sb<sup>V</sup>. **Bii.** Densitometric analysis of signals shown in panel Bi was carried out with ImageJ software. **Ci.** Percentage of intracellular survival of *L. braziliensis* amastigotes infecting THP-1 MΦ cells transfected with non-silencing siRNA or TRX siRNA ( $TRX^{KD}$ ) and treated with Sb<sup>V</sup> (32  $\mu$ g/mL); infected and untreated THP-1 MΦ were used as controls. **Cii.** Photomicrographs of human THP-1 MΦ cells containing amastigotes (arrow) transfected with non-silencing or  $TRX^{KD}$  and treated or not with 32  $\mu$ g/mL of Sb<sup>V</sup>. (Giemsa stain; scale bar = 20  $\mu$ m). The results represent the average of two to three independent experiments + SEM. Significant differences were determined by two-way ANOVA, followed by Bonferroni's Multiple Comparison Test, \*\*\*  $P$  < 0.01.

**Fig. S4**

**Supplementary FIG. S4. Silencing of the human  $\beta$ -ACTIN gene did not increase the intracellular susceptibility of *L. braziliensis* amastigotes to Sb<sup>V</sup> treatment in THP1 human MΦ cells.** Efficacy of  $\beta$ -ACTIN gene silencing was determined at the mRNA and protein expression levels by real-time PCR and western blotting analyses, respectively. A. Percentage of the remaining levels of mRNA expression in the THP-1 MΦ infected and infected and treated groups (non-silencing siRNA negative control and silenced samples). Bi = Remaining levels of protein expression. Line 1 = THP-1 MΦ transfected with non-silencing siRNA and infected with *L. braziliensis* (negative control). Line 2 = THP-1 MΦ cells transfected with  $\beta$ -ACTIN siRNA ( $\beta$ -ACTIN<sup>KD</sup>) and infected. Line 3 = THP-1 MΦ cells transfected with non-silencing siRNA, infected and treated with Sb<sup>V</sup> (32  $\mu$ g/mL). Line 4 = THP-1 MΦ cells transfected with  $\beta$ -ACTIN siRNA ( $\beta$ -ACTIN<sup>KD</sup>), infected and treated with Sb<sup>V</sup>. Bii = Densitometric analysis of the signals shown in panel Bi using the software ImageJ. C = Percentage of intracellular survival of *L. braziliensis* amastigotes infecting THP-1 MΦ cells transfected with non-silencing siRNA or  $\beta$ -ACTIN<sup>KD</sup> and treated with Sb<sup>V</sup> (32  $\mu$ g/mL); infected and untreated THP-1 MΦ cells were used as controls. The results represent the average of two to three independent experiments + SEM. Significant differences were determined by two-way ANOVA, followed by Bonferroni's Multiple Comparison Test, \*\*  $P < 0.01$  and \*\*\*  $P < 0.01$ .

Supplementary Table S1. Sequences of siRNA genes involved in the antioxidant defense used for the gene-inhibition assays.

siRNA name	Gene	Gene symbol	5'-3' target sequence	5'-3' sense strand	5'-3' antisense strand
HsACTB6	NM_001101	ACTB	CGCCCGCGCTCGTCGACAA	CCGCGCUCGUCGUCGACAATT	UUGUCGACGAGCGCGCG
HsTRX_1	NM_003329	TRX	CACCATTAATGAATTAGTCTA	CCAUUAAUGAAUUAGCUATT	UAGACUAUUCAUUAUGGTG
HsTRX_2	NM_003329	TRX	AACCAGCCATTGGCTATTAA	CCAGCCAUUGGCUAUUUAATT	UUAAAAGCCAUGGCUGGTT
HsTRX_3	NM_003329	TRX	TGCCATCTGCGTGACAATAAA	CCAUCUGCGUGACAAUUAATT	UUUAUUGUCACGCAGAUGGCA
HsGSTP1_1	NM_000852	GSTP1	AAGGATGACTATGTGAAGGCA	GGAUGACUAUGUGAAGGCATT	UGCCUUCACAUAGUCAUCCTT
HsGSTP1_2	NM_000852	GSTP1	CCAGATCTCCTTCGCTGACTA	AGAUCUCCUUCGCUGACUATT	UAGUCAGCGAAGGAGAUCUGG
HsGSTP1_7	NM_000852	GSTP1	CCCATCAATGGCAACGGGAAA	CAUCAAUGGCAACGGGAAATT	UUUCCGUUGCCAUUGAUGGG
HsGSS_1	NM_000178	GSS	TCCGACGAACATTGAAGATA	CGACGAACAUUUGAAGAUATT	UAUCUUCAAUGUUCGUCGGA
HsGSS_2	NM_000178	GSS	CTGGTGCTACTGATTGCTCAA	GGUGCUACUGAUUGCUCUATT	UUGAGCAAUCAGUAGCACCAG
HsGSS_8	NM_000178	GSS	TTGGGATAGGACTGAGTGGTA	GGGAUAGGACUGAGUGGUATT	UACCACUCAGUCCUAUCCCAA
HsABCB5_9	NM_178559	ABCB5	TTTGATGTTCGTGTAAATGCAA	UGAUGUUCGUGUAUUGCAATT	UUGCAUUACACGAACAUCAAA
HsABCB5_12	NM_178559	ABCB5	GAGAATGACATCAGAGCTTA	GAAUGACAUCAAGAGCUUUATT	UAAAGCUCUGAUGUCAUUCTC
HsABCB5_14	NM_178559	ABCB5	CAGAGGTTATATGATCCGGAT	GAGGUUAUAUGAACCGGAUTT	AUCCGGAUCAUUAACCUCTG
Allstars AF 488 Negative control	Not apply	DSsiRNA control sequence	Not apply	QIAGEN Property	QIAGEN Property

Supplementary Table S2. Modulation of Oxidative Stress gene expression levels in human MDMs cells by *L. braziliensis* infection and Glucantime® (Sb<sup>V</sup>) treatment<sup>a</sup>.

Refseq	Symbol	Description	Oxidative Stress	Fold change gene expression					
				<i>L. braziliensis</i>	p value	Sb <sup>V</sup>	p value		
NM_000477	ALB	Albumin		1.4773	0.47	1.695	0.48	2.4182	0.25
NM_000697	ALOX12	Arachidonate 12-lipoxygenase		2.081	0.25	-1.0475	0.88	3.6403	0.24
NM_001159	AOX1	Aldehyde oxidase 1		-1.0513	0.61	1.0163	0.47	1.1979	0.31
NM_000041	APOE	Apolipoprotein E		2.7876	0.80	6.461	0.21	5.816	0.32
NM_004045	ATOX1	ATX1 antioxidant protein 1 homolog (yeast)		3.6225	0.23	4.4184	0.05	4.1014	0.29
NM_004052	BNIP3	BCL2/adenovirus E1B 19kDa interacting protein 3		4.5989	0.09	6.6093	0.004	4.987	0.33
NM_001752	CAT	Catalase		3.3574	0.12	8.0953	<0,001	5.0263	0.28
NM_002985	CCL5	Chemokine (C-C motif) ligand 5		1.529	0.26	1.7075	0.24	1.3582	0.26
NM_005125	CCS	Copper chaperone for superoxide dismutase		1.9522	0.42	3.5493	0.093	2.0695	0.30
NM_000397	CYBB	Cytochrome b-245, beta polypeptide		2.863	0.047	3.3381	0.084	1.3859	0.24
NM_134268	CYGB	Cytoglobin		3.1808	0.96	6.3211	0.29	5.1408	0.35
NM_014762	DHCR24	24-dehydrocholesterol reductase		1.2843	0.83	1.3273	0.52	1.2039	0.33
NM_175940	DUOX1	Dual oxidase 1		-1.3039	0.83	-1.588	0.21	1.5295	0.32
NM_014080	DUOX2	Dual oxidase 2		-2.4566	0.26	-1.346	0.33	-1.7661	0.69
NM_004417	DUSP1	Dual specificity phosphatase 1		2.1864	0.49	1.7915	0.91	2.503	0.33
NM_001979	EPHX2	Epoxide hydrolase 2, cytoplasmic		-1.0266	0.55	1.7351	0.72	-1.1448	0.85
NM_000502	EPX	Eosinophil peroxidase		1.2326	0.81	2.9288	0.13	2.456	0.32
NM_021953	FOXM1	Forkhead box M1		2.1408	0.44	3.5217	0.12	2.4957	0.33
NM_002032	FTH1	Ferritin, heavy polypeptide 1		5.9163	0.13	8.4497	0.03	4.3093	0.20
NM_001498	GCLC	Glutamate-cysteine ligase, catalytic subunit		1.3661	0.46	1.8373	0.15	-1.3118	0.67
NM_002061	GCLM	Glutamate-cysteine ligase, modifier subunit		2.3032	0.26	9.737	<0,001	2.0801	0.18
NM_000581	GPX1	Glutathione peroxidase 1		1.6099	0.12	1.5006	0.20	1.4147	0.34
NM_002083	GPX2	Glutathione peroxidase 2 (gastrointestinal)		3.2323	0.22	3.0554	0.22	5.5774	<0,05
NM_002084	GPX3	Glutathione peroxidase 3 (plasma)		1.7614	0.036	1.3925	0.29	3.0632	0.26
NM_002085	GPX4	Glutathione peroxidase 4 (phospholipid hydroperoxidase)		2.2846	0.55	2.5378	0.47	5.5142	0.31
NM_001509	GPX5	Glutathione peroxidase 5 (epididymal androgen-related protein)		-2.849	0.013	-3.0026	0.011	-2.5977	0.50
NM_182701	GPX6	Glutathione peroxidase 6 (olfactory)		-2.8681	0.084	-2.8257	0.085	-2.7885	0.34
NM_015696	GPX7	Glutathione peroxidase 7		2.0799	0.45	2.8148	0.11	2.5332	0.32
NM_000637	GSR	Glutathione reductase		1.8274	0.57	5.5407	<0,05	6.3131	<0,01
NM_000178	GSS	Glutathione synthetase		1.4432	0.55	2.9867	0.03	3.3843	0.32
NM_000852	GSTP1	Glutathione S-transferase pi 1		3.4622	0.46	8.6994	<0,001	15.9838	<0,001
NM_001513	GSTZ1	Glutathione transferase zeta 1		1.1629	0.62	2.9844	0.05	2.2111	0.34

NM_001518	<i>GTF2I</i>	General transcription factor Ili	1.0334	0.97	<b>3.2754</b>	<b>0.032</b>	2.3125	0.31
NM_002133	<i>HMOX1</i>	Heme oxygenase (decycling) 1	1.4678	0.31	<b>9.9907</b>	0.072	<b>6.3742</b>	<b>0.05</b>
NM_005345	<i>HSPA1A</i>	Heat shock 70kDa protein 1A	1.3499	0.43	<b>4.4116</b>	<b>0.034</b>	2.10	0.12
NM_006121	<i>KRT1</i>	Keratin 1	1.6194	0.47	1.5952	0.44	2.023	0.36
NM_006151	<i>LPO</i>	Lactoperoxidase	1.1563	0.92	2.6097	0.12	2.7078	0.33
NM_005368	<i>MB</i>	Myoglobin	<b>-4.2296</b>	<b>0.026</b>	<b>-3.9552</b>	<b>0.025</b>	-1.379	0.62
		Mannose-binding lectin (protein C) 2, soluble	<b>-3.3322</b>	0.34	-2.3832	0.34	-2.9091	0.35
NM_000242	<i>MBL2</i>							
NM_004528	<i>MGST3</i>	Microsomal glutathione S-transferase 3	1.5336	0.94	1.4235	0.96	2.6939	0.34
NM_000250	<i>MPO</i>	Myeloperoxidase	-1.0571	0.98	1.1371	0.65	2.2895	0.32
		MpV17 mitochondrial inner membrane protein						
NM_002437	<i>MPV17</i>		1.1726	0.67	1.2307	0.55	1.5951	0.37
NM_012331	<i>MSRA</i>	Methionine sulfoxide reductase A	-1.259	0.81	1.1616	0.76	1.0718	0.40
NM_005954	<i>MT3</i>	Metallothionein 3	1.6406	0.38	-1.8118	0.74	-1.4194	0.28
NM_000265	<i>NCF1</i>	Neutrophil cytosolic factor 1	1.2888	0.58	1.3073	0.33	1.2646	0.47
NM_000433	<i>NCF2</i>	Neutrophil cytosolic factor 2	1.1849	0.41	<b>3.159</b>	<b>0.007</b>	2.8046	0.27
NM_000625	<i>NOS2</i>	Nitric oxide synthase 2, inducible	1.1484	0.97	-1.7605	0.24	1.4365	0.41
NM_016931	<i>NOX4</i>	NADPH oxidase 4	1.003	0.99	1.4251	0.30	1.245	0.44
		NADPH oxidase, EF-hand calcium binding domain 5						
NM_024505	<i>NOX5</i>		-1.6054	0.12	-1.2794	0.27	-1.0048	0.41
NM_000903	<i>NQO1</i>	NAD(P)H dehydrogenase, quinone 1	<b>-3.3659</b>	0.078	1.3748	0.57	<b>3.2951</b>	0.28
NM_002452	<i>NUDT1</i>	Nudix (nucleoside diphosphate linked moiety X)-type motif 1	1.175	0.79	1.285	0.95	1.3635	0.63
NM_181354	<i>OXR1</i>	Oxidation resistance 1	1.4948	0.40	1.5869	0.28	2.3281	0.32
NM_005109	<i>OXSR1</i>	Oxidative-stress responsive 1	-1.0414	0.61	1.1977	0.61	2.0056	0.34
NM_020992	<i>PDLIM1</i>	PDZ and LIM domain 1	-1.2736	0.65	1.1662	0.67	1.5183	0.40
NM_007254	<i>PNKP</i>	Polynucleotide kinase 3'-phosphatase	-1.0926	0.64	1.6981	0.13	1.5312	0.34
NM_002574	<i>PRDX1</i>	Peroxiredoxin 1	1.0676	0.87	1.5026	0.30	1.8425	0.28
NM_005809	<i>PRDX2</i>	Peroxiredoxin 2	1.4165	0.26	2.3535	0.04	1.9024	0.17
NM_006793	<i>PRDX3</i>	Peroxiredoxin 3	1.1347	0.73	2.266	0.13	1.6317	0.38
NM_006406	<i>PRDX4</i>	Peroxiredoxin 4	1.3988	0.15	2.5332	<b>0.0006</b>	1.8357	0.08
NM_181652	<i>PRDX5</i>	Peroxiredoxin 5	1.3844	0.25	2.5919	<b>0.0019</b>	2.2753	0.07
NM_004905	<i>PRDX6</i>	Peroxiredoxin 6	1.0327	0.84	1.7842	0.43	2.4915	0.32
NM_020820	<i>PREX1</i>	Phosphatidylinositol-3,4,5-trisphosphate-dependent Rac exchange factor 1	-1.0496	0.48	1.0177	0.66	1.4496	0.62
NM_183079	<i>PRNP</i>	Prion protein	-1.4223	0.35	-1.2756	0.49	-1.0444	0.49
NM_000962	<i>PTGS1</i>	Prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase)	-1.4678	0.085	-1.1121	0.99	1.105	0.49
NM_000963	<i>PTGS2</i>	Prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)	<b>-3.1546</b>	<b>0.043</b>	-1.657	0.18	-1.9232	0.23
NM_012293	<i>PXDN</i>	Peroxidasin homolog (Drosophila)	1.2474	0.80	-1.3226	0.82	-1.3178	0.60
NM_014245	<i>RNF7</i>	Ring finger protein 7	-1.2722	0.34	1.3455	0.37	-1.1987	0.66
NM_182826	<i>SCARA3</i>	Scavenger receptor class A, member 3	2.1652	0.36	2.4605	0.30	1.2269	0.52
NM_203472	<i>SELS</i>	Selenoprotein S	1.1293	0.62	2.4311	<b>0.018</b>	1.2551	0.38
NM_005410	<i>SEPP1</i>	Selenoprotein P, plasma, 1	-1.3672	0.54	<b>-3.7941</b>	0.42	-1.3966	0.69
NM_003019	<i>SFTP D</i>	Surfactant protein D	-1.1039	0.95	-2.1389	0.80	2.4943	0.31
NM_012237	<i>SIRT2</i>	Sirtuin 2	1.6318	0.16	2.5347	0.11	2.684	0.12
NM_000454	<i>SOD1</i>	Superoxide dismutase 1, soluble	1.344	0.49	1.9183	0.11	1.9282	0.27
NM_000636	<i>SOD2</i>	Superoxide dismutase 2, mitochondrial	-1.3283	0.32	-1.3185	0.43	1.0679	0.87
NM_003102	<i>SOD3</i>	Superoxide dismutase 3, extracellular	<b>-5.6173</b>	<b>&lt; 0.001</b>	-1.3981	0.87	-2.5788	0.59
NM_003900	<i>SQSTM1</i>	Sequestosome 1	-2.3728	<b>0.043</b>	1.371	0.38	<b>4.6373</b>	0.26

NM_080725	<i>SRXN1</i>	Sulfiredoxin 1	-1.8999	0.27	1.8687	0.47	2.2622	0.27
NM_006374	<i>STK25</i>	Serine/threonine kinase 25	-1.2861	0.32	2.2788	<b>0.029</b>	1.1259	0.79
NM_000547	<i>TPO</i>	Thyroid peroxidase	1.8106	0.35	2.3046	0.21	1.4283	0.35
NM_003319	<i>TTN</i>	Titin	1.388	0.88	2.1973	0.31	1.2805	0.98
NM_003329	<i>TXN</i>	Thioredoxin	-1.2295	0.49	<b>3.6591</b>	<b>&lt;0.001</b>	<b>6.6256</b>	0.23
NM_003330	<i>TXNRD1</i>	Thioredoxin reductase 1	-1.0954	0.53	<b>-11.085</b>	0.99	1.8225	0.61
NM_006440	<i>TXNRD2</i>	Thioredoxin reductase 2	1.6792	0.92	2.9196	0.56	2.7332	0.43
NM_003355	<i>UCP2</i>	Uncoupling protein 2 (mitochondrial, proton carrier)	2.4417	<b>0.038</b>	<b>6.6794</b>	<b>&lt;0.001</b>	<b>5.0742</b>	0.10

<sup>a</sup> Modulation of gene expression was measured after 3 days of incubation with 32 µg/mL of Sb<sup>V</sup> using the RT<sup>2</sup> Human Oxidative Stress PCR expression array analysis (QIAGEN). Data are represented as fold change and mean ± S:E:M

Supplementary Table S3. Modulation of drug transporters gene expression levels in human MDMs cells by *L. braziliensis* infection and Glucantime® ( $Sb^V$ )<sup>a</sup> treatment.

Refseq	Symbol	Description Drug Transporters	Fold change gene expression					
			<i>L. braziliensis</i>	p value	$Sb^V$	p value	<i>L. braziliensis</i> and $Sb^V$	p value
NM_005502	ABCA1	ATP-binding cassette, sub-family A (ABC1), member 1	2.7882	0.38	-	0.51	<b>6.0721</b>	0.24
NM_173076	ABCA12	ATP-binding cassette, sub-family A (ABC1), member 12	1.2124	0.44	1.4417	0.37	1.5115	0.25
NM_152701	ABCA13	ATP-binding cassette, sub-family A (ABC1), member 13	1.6592	0.93	2.0333	0.41	2.5366	0.36
NM_001606	ABCA2	ATP-binding cassette, sub-family A (ABC1), member 2	1.2663	0.30	2.1881	0.71	<b>4.9661</b>	0.34
NM_001089	ABCA3	ATP-binding cassette, sub-family A (ABC1), member 3	1.2887	0.52	1.5093	0.89	2.3793	0.37
NM_000350	ABCA4	ATP-binding cassette, sub-family A (ABC1), member 4	1.2334	0.39	1.5156	0.36	2.2194	0.32
NM_018672	ABCA5	ATP-binding cassette, sub-family A (ABC1), member 5	1.5198	0.50	-	0.89	1.3186	0.59
NM_080283	ABCA9	ATP-binding cassette, sub-family A (ABC1), member 9	1.7557	0.25	1.5586	0.39	2.5727	0.21
NM_000927	ABCB1/ PGP	ATP-binding cassette, sub-family B (MDR/TAP), member 1	1.0709	0.42	-	0.75	1.3397	0.78
NM_003742	ABCB11/ BSEP	ATP-binding cassette, sub-family B (MDR/TAP), member 11	1.8299	0.90	<b>9.5751</b>	<b>&lt;0,001</b>	<b>5.2472</b>	0.25
NM_000443	ABCB4	ATP-binding cassette, sub-family B (MDR/TAP), member 4	1.752	0.55	1.4065	0.86	1.3751	0.54
NM_178559	ABCB5	ATP-binding cassette, sub-family B (MDR/TAP), member 5	<b>17.0634</b>	<b>&lt;0,001</b>	<b>8.8499</b>	<b>&lt;0,001</b>	<b>13.8963</b>	<b>&lt;0,001</b>
NM_005689	ABCB6	ATP-binding cassette, sub-family B (MDR/TAP), member 6	<b>3.3862</b>	0.48	<b>4.795</b>	0.14	<b>10.1194</b>	<b>&lt;0,001</b>
NM_004996	ABCC1	ATP-binding cassette, sub-family C (CFTR/MRP), member 1	1.0506	0.88	1.1613	0.95	2.1409	0.35
NM_033450	ABCC10	ATP-binding cassette, sub-family C (CFTR/MRP), member 10	-2.0837	0.22	-	0.92	1.7027	0.43
NM_032583	ABCC11	ATP-binding cassette, sub-family C (CFTR/MRP), member 11	-2.6092	0.33	2.0677	0.84	<b>3.1774</b>	0.44
NM_033226	ABCC12	ATP-binding cassette, sub-family C (CFTR/MRP), member 12	1.6172	0.39	<b>3.637</b>	0.25	2.952	<b>0.04</b>
NM_000392	ABCC2	ATP-binding cassette, sub-family C (CFTR/MRP), member 2	1.0925	0.63	1.1162	0.67	2.3375	0.45
NM_003786	ABCC3	ATP-binding cassette, sub-family C (CFTR/MRP), member 3	1.1527	0.73	1.1234	0.71	1.8241	0.34
NM_005845	ABCC4	ATP-binding cassette, sub-family C (CFTR/MRP), member 4	-1.0153	0.59	1.0319	0.69	1.761	0.45
NM_005688	ABCC5	ATP-binding cassette, sub-family C (CFTR/MRP), member 5	1.4657	0.95	1.4338	0.60	2.9503	0.27
NM_000033	ABCD1	ATP-binding cassette, sub-family D (ALD), member 1	-1.0815	0.47	2.1793	0.31	1.7251	0.41
NM_002858	ABCD3	ATP-binding cassette, sub-family D (ALD), member 3	1.7856	0.33	1.734	0.52	1.9456	0.34

NM_005050	ABCD4	ATP-binding cassette, sub-family D (ALD), member 4	19.7497	0.35	3.5205	0.57	2.393	0.87
NM_001090	ABCF1	ATP-binding cassette, sub-family F (GCN20), member 1	2.7232	0.44	-	1.0142	0.68	2.7466
NM_004827	ABCG2/ BCRP	ATP-binding cassette, sub-family G (WHITE), member 2	-1.2278	0.30	1.3645	0.30	2.2644	0.005
NM_022437	ABCG8	ATP-binding cassette, sub-family G (WHITE), member 8	-2.3154	0.14	1.5256	0.28	-1.3179	0.50
NM_198098	AQP1	Aquaporin 1 (Colton blood group)	1.997	0.39	3.7719	0.16	4.8047	0.12
NM_001170	AQP7	Aquaporin 7	1.6601	0.37	2.6159	0.28	4.5497	0.20
NM_020980	AQP9	Aquaporin 9	1.0335	0.75	1.4472	0.45	1.6963	0.40
NM_001694	ATP6V0C	ATPase, H+ transporting, lysosomal 16kDa, V0 subunit c	-1.0566	0.94	-	1.2204	0.84	1.3498
NM_000052	ATP7A	ATPase, Cu++ transporting, alpha polypeptide	-1.3336	0.51	1.1477	0.84	1.2083	0.46
NM_000053	ATP7B	ATPase, Cu++ transporting, beta polypeptide	-1.0339	0.83	2.2603	0.39	2.2512	0.35
NM_017458	MVP	Major vault protein	-1.0625	0.66	1.6415	0.68	1.9275	0.35
NM_003049	SLC10A1	Solute carrier family 10 (sodium/bile acid cotransporter family), member 1	2.2255	0.18	1.1896	0.40	4.3593	0.04
NM_000452	SLC10A2	Solute carrier family 10 (sodium/bile acid cotransporter family), member 2	1.0248	0.94	4.6554	0.17	3.3093	0.24
NM_005073	SLC15A1	Solute carrier family 15 (oligopeptide transporter), member 1	-1.3637	0.29	2.4727	0.13	2.4577	0.17
NM_021082	SLC15A2	Solute carrier family 15 (H+/peptide transporter), member 2	-1.4179	0.32	1.59	0.25	1.632	0.22
NM_003051	SLC16A1	Solute carrier family 16, member 1 (monocarboxylic acid transporter 1)	-1.3368	0.73	-1.059	0.95	1.3932	0.94
NM_006517	SLC16A2	Solute carrier family 16, member 2 (monocarboxylic acid transporter 8)	1.1281	0.74	1.3588	0.47	1.814	0.42
NM_004207	SLC16A3	Solute carrier family 16, member 3 (monocarboxylic acid transporter 4)	-1.12	0.64	2.5082	0.02	3.2376	0.099
NM_194255	SLC19A1	Solute carrier family 19 (folate transporter), member 1	-1.1381	0.88	1.2764	0.66	1.4809	0.39
NM_006996	SLC19A2	Solute carrier family 19 (thiamine transporter), member 2	1.2952	0.38	2.9151	0.074	2.0503	0.06
NM_025243	SLC19A3	Solute carrier family 19, member 3	1.0728	0.88	1.9823	0.26	1.7264	0.36
NM_003057	SLC22A1/ OCT 1	Solute carrier family 22 (organic cation transporter), member 1	2.5649	0.09	1.5658	0.17	4.5953	0.16
NM_003058	SLC22A2/ OCT2	Solute carrier family 22 (organic cation transporter), member 2	-1.0497	0.58	-	1.0436	0.89	1.1259
NM_021977	SLC22A3	Solute carrier family 22 (extraneuronal monoamine transporter), member 3	1.1381	0.91	1.8145	0.29	1.8979	0.27
NM_004790	SLC22A6	Solute carrier family 22 (organic anion transporter), member 6	1.4323	0.45	1.9293	0.32	3.0695	0.30
NM_006672	SLC22A7	Solute carrier family 22 (organic anion transporter), member 7	-1.4221	0.27	-1.07	0.42	1.8342	0.45
NM_004254	SLC22A8	Solute carrier family 22 (organic anion transporter), member 8	-1.2561	0.67	1.4076	0.46	2.6641	0.19
NM_080866	SLC22A9	Solute carrier family 22 (organic anion transporter), member 9	1.1509	0.10	1.9423	0.21	2.489	0.07
NM_014251	SLC25A13	Solute carrier family 25, member 13 (citrin)	1.0622	0.59	1.2905	0.16	1.5898	0.32

NM_004213	SLC28A1	Solute carrier family 28 (sodium-coupled nucleoside transporter), member 1	1.7294	0.87	1.9761	0.32	<b>5.1152</b>	0.189
NM_004212	SLC28A2	Solute carrier family 28 (sodium-coupled nucleoside transporter), member 2	-1.639	0.65	-1.2693	0.60	-1.1724	0.47
NM_022127	SLC28A3	Solute carrier family 28 (sodium-coupled nucleoside transporter), member 3	-1.6493	0.67	-1.1962	0.49	-1.3013	0.89
NM_004955	SLC29A1	Solute carrier family 29 (nucleoside transporters), member 1	1.1007	0.87	1.4824	0.45	1.8015	0.26
NM_001532	SLC29A2	Solute carrier family 29 (nucleoside transporters), member 2	1.0231	0.70	2.362	0.22	2.256	0.28
NM_006516	SLC2A1	Solute carrier family 2 (facilitated glucose transporter), member 1	1.9482	0.25	1.4985	0.62	2.2889	0.31
NM_000340	SLC2A2	Solute carrier family 2 (facilitated glucose transporter), member 2	-1.1387	0.49	1.5713	0.33	2.0765	0.14
NM_006931	SLC2A3	Solute carrier family 2 (facilitated glucose transporter), member 3	-1.1478	0.10	1.1963	0.59	1.5309	0.36
NM_001859	SLC31A1	Solute carrier family 31 (copper transporters), member 1	-1.4639	0.28	1.4811	0.50	1.689	0.41
NM_018976	SLC38A2	Solute carrier family 38, member 2	-1.3534	0.32	-1.005	0.10	-1.1358	0.90
NM_033518	SLC38A5	Solute carrier family 38, member 5	1.1475	0.92	1.2243	0.94	1.7964	0.33
NM_000341	SLC3A1	Solute carrier family 3 (cystine, dibasic and neutral amino acid transporters, activator of cystine, dibasic and neutral amino acid transport), member 1	-1.585	0.39	-1.0462	0.81	1.0633	0.44
NM_002394	SLC3A2	Solute carrier family 3 (activators of dibasic and neutral amino acid transport), member 2	-1.0275	0.91	1.2543	0.33	2.0758	0.11
NM_000343	SLC5A1	Solute carrier family 5 (sodium/glucose cotransporter), member 1	-1.3023	0.51	1.5097	0.63	2.5716	0.75
NM_014227	SLC5A4	Solute carrier family 5 (low affinity glucose cotransporter), member 4	1.1371	0.99	1.8769	0.37	1.4851	0.54
NM_014331	SLC7A11	Solute carrier family 7 (anionic amino acid transporter light chain, xc- system), member 11	1.951	0.26	2.3558	0.14	<b>5.3677</b>	0.13
NM_003486	SLC7A5	Solute carrier family 7 (amino acid transporter light chain, L system), member 5	-1.1129	0.80	1.1322	0.65	1.5785	0.22
NM_003983	SLC7A6	Solute carrier family 7 (amino acid transporter light chain, y+L system), member 6	1.3	0.83	1.1632	0.89	1.4166	0.62
NM_003982	SLC7A7	Solute carrier family 7 (amino acid transporter light chain, y+L system), member 7	1.4153	0.39	1.4727	0.32	1.6238	0.30
NM_182728	SLC7A8	Solute carrier family 7 (amino acid transporter light chain, L system), member 8	1.4066	0.70	<b>3.0578</b>	<b>0.05</b>	2.6496	0.22
NM_014270	SLC7A9	Solute carrier family 7 (glycoprotein-associated amino acid transporter light chain, bo,+ system), member 9	-1.1469	0.65	1.6963	0.89	1.731	0.76
NM_021094	SLCO1A2	Solute carrier organic anion transporter family, member 1A2	-1.0442	0.93	1.2662	0.99	2.8988	0.16
NM_006446	SLCO1B1/ OATP1B1	Solute carrier organic anion transporter family, member 1B1	-1.3877	0.30	1.1257	0.77	1.647	0.43
NM_019844	SLCO1B3/ OATP1B3	Solute carrier organic anion transporter family, member 1B3	1.3578	0.51	1.5161	0.45	1.8029	0.35
NM_005630	SLCO2A1	Solute carrier organic anion transporter family, member 2A1	1.5173	0.30	<b>4.5364</b>	0.10	2.5803	0.06

NM_007256	<i>SLCO2B1</i>	Solute carrier organic anion transporter family, member 2B1	-1.0372	0.66	1.2573	0.94	2.0468	0.26
NM_013272	<i>SLCO3A1</i>	Solute carrier organic anion transporter family, member 3A1	-1.5625	0.22	1.2381	0.40	1.0574	0.96
NM_016354	<i>SLCO4A1</i>	Solute carrier organic anion transporter family, member 4A1	1.9763	0.24	2.4582	0.16	2.6362	0.26
NM_000593	<i>TAP1</i>	Transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)	1.1781	0.99	1.1559	0.76	1.5873	0.93
NM_000544	<i>TAP2</i>	Transporter 2, ATP-binding cassette, sub-family B (MDR/TAP)	1.1559	0.92	1.7514	0.23	2.4777	0.13
NM_003374	<i>VDAC1</i>	Voltage-dependent anion channel 1	1.6296	0.45	2.2844	0.08	1.9606	0.28
NM_003375	<i>VDAC2</i>	Voltage-dependent anion channel 2	1.2376	0.85	2.0892	0.19	2.2265	0.18

<sup>a</sup> Modulation of gene expression was measured after 3 days of incubation with 32 µg/mL of Sb<sup>V</sup> using the RT<sup>2</sup> Human Drug Transporters PCR expression array analysis (QIAGEN). Data are represented as fold change and mean ± S:E:M