

Table S1

Drug	ATC code	CAS number	% Inhibition of OCT2-dependent MF uptake		% Inhibition of OCT2-dependent MPP ⁺ uptake	
			at 20 μ M (mean \pm SEM)	at 200 μ M (mean \pm SEM)	at 20 μ M (mean \pm SEM)	At 200 μ M (mean \pm SEM)
Acamprosate	N07BB03	77337-73-6	2.7 \pm 4.8	0.9 \pm 5.8	-8.1 \pm 4.4	-7.7 \pm 5.2
Acetylcysteine	R05CB01, V03AB23, S01XA08	616-91-1	13.2 \pm 6.3	11.0 \pm 9.4	-35.6 \pm 7.7	-36.0 \pm 3.2
Agomelatine	N06AX22	138112-76-2	71.3 \pm 2.6	95.5 \pm 1.8	-10.3 \pm 2.7	39.9 \pm 3.5
Alendronate	M05BA04	66376-36-1	30.7 \pm 9.0	75.6 \pm 0.5	5.4 \pm 3.9	10.5 \pm 2.0
Allopurinol	M04AA01	315-30-0	24.8 \pm 6.9	26.8 \pm 3.9	35.6 \pm 7.5	52.7 \pm 8.8
Alprazolam	N05BA12	28981-97-7	43.0 \pm 5.0	88.3 \pm 3.6	14.3 \pm 7.4	78.5 \pm 3.6
Amisulpride	N05AL05	71675-85-9	52.0 \pm 2.1	91.7 \pm 0.7	25.5 \pm 7.0	51.3 \pm 6.7
Amitriptyline	N06AA09	549-18-8	95.4 \pm 4.8	101.7 \pm 2.2	58.4 \pm 2.8	97.8 \pm 0.6
Amlodipine	C08CA01	88150-42-9	21.9 \pm 9.0	110.0 \pm 17.3	-13.8 \pm 7.4	39.3 \pm 6.8
Amoxicillin	J01CA04	26787-78-0	3.2 \pm 6.6	4.5 \pm 5.1	-21.0 \pm 11.1	-13.5 \pm 14.5
Aripiprazole	N05AX12	129722-12-9	53.4 \pm 9.1	82.0 \pm 6.7	6.7 \pm 3.6	16.9 \pm 5.2
ASA	N02BA01, B01AC06, A01AD05	50-78-2	-18.7 \pm 11.0	1.3 \pm 8.9	-10.6 \pm 5.7	-1.5 \pm 4.5
Atenolol	C07AB03	29122-68-7	28.0 \pm 2.4	41.1 \pm 5.1	-14.9 \pm 3.5	-3.2 \pm 9.7
Benperidol	N05AD07	2062-84-2	58.7 \pm 3.3	72.2 \pm 2.7	-21.5 \pm 2.8	1.6 \pm 8.3
Bisoprolol	C07AB07	66722-44-9	57.2 \pm 4.0	75.8 \pm 4.5	-16.1 \pm 2.2	11.8 \pm 5.5
Bromazepam	N05BA08	1812-30-2	27.6 \pm 2.6	77.9 \pm 1.4	-16.3 \pm 9.0	14.7 \pm 8.3
Candesartan	C09CA06	139481-59-7	48.0 \pm 3.7	69.7 \pm 2.7	0.9 \pm 0.1	-2.4 \pm 4.0
Captopril	C09AA01	62571-86-2	-21.6 \pm 19.5	-59.0 \pm 0.9	3.8 \pm 5.7	10.2 \pm 6.8
Carbamazepine	N03AF01	298-46-4	0.2 \pm 3.8	83.8 \pm 1.2	-51.4 \pm 9.2	-2.1 \pm 4.4
Carvedilol	C07AG02	72956-09-3	84.3 \pm 5.2	98.6 \pm 0.5	32.2 \pm 3.7	88.5 \pm 1.5
Cefuroxime	J01DC02	55268-75-2	29.9 \pm 9.7	50.3 \pm 11.6	-10.5 \pm 7.0	-30.8 \pm 12.9
Chlorprothixene	N05AF03	6469-93-8	66.8 \pm 7.9	98.4 \pm 0.9	29.9 \pm 7.5	91.7 \pm 2.2

Cholecalciferol	A11CC05	67-97-0	2.8 ± 15.7	17.1 ± 5.0	6.8 ± 5.1	10.4 ± 6.1
Citalopram	N06AB04	59729-32-7	66.6 ± 7.9	78.9 ± 8.4	40.0 ± 9.9	75.2 ± 9.7
Clomethiazole	N05CM02	6001-74-7	-9.2 ± 6.8	28.7 ± 3.9	-6.7 ± 9.2	-147.3 ± 23.7
Clomipramine	N06AA04	17321-77-6	91.5 ± 4.9	99.5 ± 3.7	90.3 ± 1.5	98.8 ± 3.0
Clopidogrel	B01AC04	120202-66-6	70.0 ± 2.0	92.8 ± 5.4	12.5 ± 0.8	41.5 ± 4.0
Clozapine	N05AH02	5786-21-0	71.4 ± 1.6	98.7 ± 0.7	43.4 ± 4.7	84.1 ± 2.5
Diazepam	N05BA01	439-14-5	83.3 ± 2.0	98.7 ± 0.5	32.2 ± 9.2	85.6 ± 1.4
Diclofenac	M01AB05, M02AA15, S01BC03, D11AX18	15307-86-5	14.3 ± 8.8	59.1 ± 6.5	8.8 ± 8.9	24.0 ± 4.0
Digitoxin	C01AA04., C01AA54, C05BZ05	71-63-6	28.7 ± 7.9	32.8 ± 2.9	-32.6 ± 3.8	-32.4 ± 8.5
Donepezil	N06DA02	884740-09-4	92.9 ± 1.2	102.5 ± 1.8	62.2 ± 8.1	99.0 ± 3.4
Doxazosin	C02CA04	74191-85-8	48.0 ± 5.5	92.1 ± 1.0	26.7 ± 10.3	45.8 ± 14.0
Doxepin	N06AA12	1229-29-4	98.8 ± 2.1	99.3 ± 0.7	94.7 ± 3.9	107.6 ± 5.1
Doxycycline	J01AA02, A01AB22	564-25-0	-21.8 ± 1.9	1.9 ± 9.1	-12.9 ± 13.1	-16.6 ± 11.7
Drospirenone	G03AA12, G03FA17	67392-87-4	88.0 ± 7.3	99.1 ± 0.7	0.0 ± 3.6	42.6 ± 1.4
Duloxetine	N06AX21	136434-34-9	76.5 ± 0.9	98.3 ± 0.2	23.3 ± 6.0	86.4 ± 5.1
Enalapril	C09AA02	75847-73-3	7.5 ± 2.3	34.2 ± 4.5	7.1 ± 7.4	20.2 ± 5.6
Escitalopram	N06AB10	128196-01-0	62.6 ± 9.2	93.8 ± 3.6	-26.3 ± 7.9	26.0 ± 10.1
Estradiol	G03CA03	50-28-2	57.9 ± 5.4	66.6 ± 2.1	10.6 ± 4.2	19.0 ± 6.5
Ethinylestradiol	G03CA01, L02AA03	57-63-6	31.8 ± 8.1	62.2 ± 13.1	14.0 ± 8.8	46.8 ± 6.3
Etoricoxib	M01AH05	202409-33-4	64.1 ± 6.8	99.2 ± 2.7	2.3 ± 4.0	72.4 ± 2.2
Ezetimibe	C10AX09	163222-33-1	-6.8 ± 9.7	0.2 ± 10.0	-12.6 ± 12.4	-13.2 ± 11.5
Felodipine	C08CA02	72509-76-3	4.9 ± 6.1	15.9 ± 12.1	-8.8 ± 12.0	-16.8 ± 10.8
Fenofibrate	C10AB05	49562-28-9	43.0 ± 9.9	73.4 ± 4.7	12.8 ± 5.0	32.0 ± 5.7
Flunitrazepam	N05CD03	1622-62-4	74.1 ± 3.1	92.9 ± 0.9	5.1 ± 8.4	57.5 ± 6.6
Fluoxetine	N06AB03	56296-78-7	79.0 ± 0.9	98.5 ± 1.2	20.2 ± 3.5	91.8 ± 2.9
Flupentixol	N05AF01	51529-01-2	75.0 ± 7.9	96.1 ± 2.1	22.9 ± 7.5	107.8 ± 5.0
Fluphenazine	N05AB02	146-56-5	91.4 ± 0.9	99.3 ± 0.4	39.3 ± 7.0	94.3 ± 3.3

Fluvastatin	C10AA04	93957-54-1	-21.1 ± 10.3	32.5 ± 8.1	-10.1 ± 6.1	5.8 ± 9.1
Furosemide	C03CA01	54-31-9	31.1 ± 7.1	45.8 ± 8.3	-19.1 ± 7.8	-30.0 ± 5.8
Gabapentin	N03AX12	60142-96-3	9.1 ± 8.2	37.6 ± 4.2	-8.4 ± 9.6	-12.5 ± 9.4
Galantamine	N06DA04	1953-04-4	51.5 ± 2.8	92.5 ± 1.2	-11.7 ± 9.4	12.3 ± 7.0
Glibenclamide	A10BB01	10238-21-8	38.7 ± 11.9	87.9 ± 3.2	-27.7 ± 5.0	-31.1 ± 1.7
Glimepiride	A10BB12	93479-97-1	66.8 ± 2.9	65.6 ± 4.6	31.1 ± 7.6	53.8 ± 15.2
Haloperidol	N05AD01	52-86-8	6.4 ± 8.9	66.9 ± 5.3	-11.2 ± 5.0	-10.6 ± 5.1
Hydrochlorothiazide	C03AA03	58-93-5	-34.7 ± 16.9	-38.6 ± 8.5	-55.4 ± 10.2	-36.6 ± 7.4
Ibuprofen	M02AA13, M01AE01, C01EB16, G02CC01	15687-27-1	23.4 ± 6.7	29.6 ± 4.1	-5.8 ± 8.0	-0.3 ± 7.5
Irbesartan	C09CA04	138402-11-6	-16.2 ± 14.4	-14.2 ± 17.8	-18.9 ± 12.4	-50.7 ± 14.1
Isosorbide dinitrate	C01DA08, C01DA58	87-33-2	-19.5 ± 6.9	21.7 ± 4.4	-20.4 ± 5.0	-82.4 ± 8.0
Lansoprazole	A02BC03	103577-45-3	87.7 ± 1.6	103.0 ± 2.7	22.1 ± 5.3	90.1 ± 1.8
Lercanidipine	C08CA13	100427-26-7	7.8 ± 3.8	-20.4 ± 11.1	-13.3 ± 8.6	-9.3 ± 3.6
Levodopa	N04BA01	59-92-7	-9.3 ± 6.8	67.3 ± 2.6	-24.6 ± 0.5	11.8 ± 1.4
Levothyroxine	H03AA01	51-48-9	0.8 ± 9.6	14.3 ± 15.2	3.6 ± 4.1	-3.3 ± 10.3
Lisinopril	C09AA03	83915-83-7	-10.3 ± 12.9	2.9 ± 9.0	16.0 ± 9.0	9.8 ± 11.8
Lithium	N05AN01	7447-41-8	-15.2 ± 7.9	-14.7 ± 6.8	-28.4 ± 7.5	-36.7 ± 9.7
Lorazepam	N05BA06	846-49-1	32.0 ± 2.2	96.5 ± 1.0	0.3 ± 5.1	17.7 ± 7.3
Lormetazepam	N05CD06	848-75-9	77.0 ± 0.6	92.4 ± 0.5	47.8 ± 8.4	69.8 ± 5.3
Losartan	C09CA01	114798-26-4	-9.3 ± 10.4	7.4 ± 8.2	-41.8 ± 8.1	-59.5 ± 6.1
Melperone	N05AD03	1622-79-3	75.0 ± 3.4	94.9 ± 4.2	8.6 ± 10.1	69.7 ± 3.8
Memantine	N06DX01	41100-52-1	54.0 ± 2.1	93.9 ± 0.6	20.6 ± 8.6	54.0 ± 7.0
Mesalazine	A07EC02	89-57-6	21.6 ± 11.1	59.8 ± 6.7	-51.3 ± 6.1	-68.0 ± 8.5
Metamizole	N02BB02	68-89-3	-4.8 ± 6.4	8.4 ± 9.8	-31.6 ± 6.0	-39.1 ± 5.1
Metformin	A10BA02	657-24-9			-17.2 ± 10.1	-12.9 ± 8.4
Methadone	N07BC02	1095-90-5	94.6 ± 0.7	99.3 ± 0.3	8.9 ± 4.4	68.7 ± 3.8
Methotrexate	L01BA01, L04AX03	59-05-2	-1.1 ± 11.4	-5.8 ± 13.0	-19.0 ± 7.2	-9.5 ± 3.0
Methylphenidate	N06BA04	298-59-9	17.9 ± 4.6	79.6 ± 2.3	11.5 ± 8.9	31.6 ± 4.7

Metoclopramide	A03FA01	364-62-5	74.7 ± 8.5	93.9 ± 0.6	24.5 ± 2.9	66.6 ± 8.4
Metoprolol	C07AB02	37350-58-6	50.5 ± 5.9	88.2 ± 1.7	23.2 ± 6.5	27.5 ± 6.9
Mirtazapine	N06AX11	85650-52-8	73.3 ± 3.0	90.7 ± 3.9	-4.8 ± 4.0	57.6 ± 6.1
Moclobemide	N06AG02	71320-77-9	4.3 ± 2.8	48.9 ± 2.1	-38.7 ± 8.5	-16.1 ± 17.7
Molsidomine	C01DX12	25717-80-0	41.4 ± 3.6	69.5 ± 1.7	-1.7 ± 8.3	3.8 ± 4.9
Moxonidine	C02AC05	75438-57-2	58.1 ± 14.5	86.1 ± 2.9	16.3 ± 6.5	23.1 ± 7.1
Nebivolol	C07AB12	118457-14-0	61.4 ± 10.4	75.2 ± 10.8	-13.7 ± 13.3	43.2 ± 3.3
Nifedipine	C08CA05	21829-25-4	18.8 ± 4.4	77.1 ± 8.0	-8.1 ± 6.1	-1.4 ± 10.2
Nitrendipine	C08CA08	39562-70-4	0.4 ± 9.8	53.2 ± 3.7	4.0 ± 6.3	-2.4 ± 5.0
Norethindrone	G03AC01, G03DC02	68-22-4	41.0 ± 11.0	87.7 ± 6.1	-29.4 ± 6.4	3.0 ± 3.3
Olanzapine	N05AH03	132539-06-1	-7.5 ± 5.7	74.9 ± 1.8	83.5 ± 9.4	109.7 ± 2.8
Olmesartan	C09CA08, C09DA08	144689-24-7	-0.1 ± 10.9	21.1 ± 7.3	-23.8 ± 7.1	-21.9 ± 13.3
Omeprazole	A02BC01	73590-58-6	94.9 ± 2.4	107.4 ± 4.3	56.0 ± 4.0	93.0 ± 0.9
Opipramol	N06AA05	909-39-7	94.7 ± 1.5	99.5 ± 0.7	14.0 ± 7.6	81.6 ± 3.9
Oxazepam	N05BA04	604-75-1	88.1 ± 1.2	97.5 ± 0.5	37.6 ± 4.7	44.6 ± 6.5
Pantoprazole	A02BC02	102625-70-7	97.1 ± 1.4	98.9 ± 0.6	108.9 ± 4.0	101.7 ± 4.4
Paroxetine	N06AB05	110429-35-1	80.6 ± 3.1	99.6 ± 1.9	15.5 ± 3.8	87.2 ± 3.6
Perazine	N05AB10	84-97-9	53.6 ± 3.6	92.0 ± 1.8	58.5 ± 2.8	65.9 ± 2.0
Pipamperone	N05AD05	2448-68-2	33.9 ± 6.0	78.1 ± 2.2	12.0 ± 4.5	33.1 ± 3.4
Piracetam	N06BX03	7491-74-9	3.4 ± 3.4	2.5 ± 1.7	-9.5 ± 12.1	-0.5 ± 10.0
Pravastatin	C10AA03	81093-37-0	-26.3 ± 11.1	-11.1 ± 11.1	-30.2 ± 5.5	-15.0 ± 5.2
Prednisolone	A07EA01, C05AA04, D07AA03, D07XA02, H02AB06, R01AD02, S01BA04, S01CB02, S02BA03, S03BA02	50-24-8	66.0 ± 2.5	91.5 ± 0.5	42.1 ± 4.4	68.6 ± 2.8
Pregabalin	N03AX16	148553-50-8	-1.3 ± 9.0	27.2 ± 5.9	-29.6 ± 7.5	-15.8 ± 5.2
Promethazine	D04AA10, R06AD02	58-33-3	83.7 ± 3.3	100.7 ± 1.3	5.7 ± 3.8	76.0 ± 3.0

Quetiapine	N05AH04	111974-72-2	23.7 ± 5.9	86.8 ± 2.8	15.8 ± 9.1	58.3 ± 4.5
Ramipril	C09AA05	87333-19-5	12.9 ± 4.1	35.4 ± 2.9	72.5 ± 7.4	83.6 ± 6.2
Ranitidine	A02BA02	66357-35-5	65.2 ± 7.7	91.5 ± 3.8	-7.9 ± 12.9	11.6 ± 3.4
Reboxetine	N06AX18	98769-84-7	64.8 ± 4.0	95.6 ± 1.4	-21.6 ± 8.3	15.4 ± 8.0
Risperidone	N05AX08	106266-06-2	81.0 ± 4.4	98.3 ± 3.1	57.8 ± 5.2	78.4 ± 1.5
Rivastigmine	N06DA03	123441-03-2	51.8 ± 4.0	91.4 ± 1.5	25.1 ± 9.1	59.4 ± 4.6
Sertraline	N06AB06	79559-97-0	88.4 ± 2.1	100.5 ± 0.7	43.6 ± 2.9	96.1 ± 1.7
Simvastatin lactone	C10AA01, C10BA02	79902-63-9	-15.4 ± 5.5	57.6 ± 10.0	48.5 ± 9.0	53.8 ± 13.1
Sitagliptin	A10BH01	486460-32-6	85.9 ± 1.1	97.5 ± 0.1	-8.2 ± 7.8	22.7 ± 6.0
Spironolactone	C03DA01	52-01-7	96.8 ± 0.5	98.4 ± 1.0	33.5 ± 4.7	95.0 ± 0.5
Tamsulosin	G04CA02	106133-20-4	87.9 ± 0.9	107.0 ± 3.1	14.9 ± 4.8	65.7 ± 2.9
Telmisartan	C09CA07	144701-48-4	95.1 ± 0.7	99.2 ± 0.2	87.1 ± 2.1	93.3 ± 2.8
Theophylline	R03DA04, R03DA54, R03DB04, R03DA74	58-55-9	-21.5 ± 13.0	-36.6 ± 10.9	-12.9 ± 5.7	-16.7 ± 6.8
Torasemide	C03CA04	56211-40-6	-33.2 ± 5.0	-19.5 ± 0.8	-11.4 ± 2.3	-40.3 ± 5.0
Tramadol	N02AX02	36282-47-0	47.1 ± 9.5	103.7 ± 9.2	5.9 ± 7.9	31.4 ± 1.4
Tranlycypromine	N06AF04	13492-01-8	39.0 ± 3.3	79.1 ± 2.9	27.8 ± 5.6	54.7 ± 3.1
Triamterene	C03DB02	396-01-0	48.0 ± 5.1	92.0 ± 2.1	6.6 ± 11.2	17.5 ± 3.8
Trimipramine	N06AA06	521-78-8	99.9 ± 0.5	100.0 ± 0.8	51.0 ± 10.2	98.6 ± 1.2
Trospium chloride	G04BD09	10405-02-4	99.3 ± 0.1	98.8 ± 0.4	83.2 ± 2.2	96.7 ± 0.7
Valproic acid	N03AG01	1069-66-5	18.5 ± 7.6	27.7 ± 1.9	-17.3 ± 9.5	-29.0 ± 9.2
Valsartan	C09CA03, C09DB01, C09DA03	137862-53-4	-41.7 ± 1.8	-12.9 ± 3.6	-77.2 ± 6.0	-82.1 ± 9.9
Venlafaxine	N06AX16	99300-78-4	17.6 ± 3.2	72.2 ± 2.5	-43.3 ± 13.0	-54.3 ± 13.1
Verapamil	C08DA01	52-53-9	84.8 ± 2.8	100.2 ± 1.5	29.4 ± 7.0	79.1 ± 2.3
Xipamide	C03BA10	14293-44-8	-22.3 ± 9.7	9.4 ± 9.2	10.5 ± 3.7	6.6 ± 9.3
Zolpidem	N05CF02	82626-48-0	96.7 ± 0.3	99.1 ± 0.5	36.5 ± 4.3	90.7 ± 8.2