Table S1

Human cDNAs and their constructs for *Xenopus* oocytes expression

Gene name	Protein name	Expression vector	Restriction enzyme site[1]	Enzyme for linearization	RNA polymerase	Genebank accession no.	Reference[4]
SLC7A5	LAT1	pcDNA40	TOPO cloning[2]	AscI	T7	AB018009.1	a
SLC7A8	LAT2	pcDNA3.1(+)	NotI	XhoI	T7	AB037669.1	b
SLC43A1	LAT3	pcDNA3.1(+)	EcoRI, NotI	XhoI	T7	AB103033.1	c
SLC43A2	LAT4	pcDNA3.1(+)	EcoRI, NotI	ApaI	T7	BC027923.1	d
SLC16A10	TAT1	pcDNA3.1(-)	NotI, EcoRI	EcoRI	T7	AB057445.1	e
SLC6A19	B^0AT1	pcDNA3.1(+)	EcoRI, NotI	ApaI	T7	AK290811.1	f
SLC6A14	$ATB^{0,+}$	pcDNA3.1(+)	EcoRI, NotI	ApaI	T7	AK313390.1[3]	g
SLC7A7	y^+LAT1	pcDNA3.1(+)	HindIII, XbaI	XbaI	T7	AB020532.1	h
SLC7A6	y^+LAT2	pcDNA3.1(+)	BamHI, XhoI	XhoI	T7	NM_003983.5	i
SLC1A4	ASCT1	pSPORT1	SalI	HindIII	T7	AB026689.1	j
SLC1A5	ASCT2	pBluescript	NotI	HindIII	T3	NM_005628.2	k
SLC38A1	SNAT1	pCMV-SPORT6	SalI, NotI	XhoI	SP6	BC010620.1	l
SLC38A2	SNAT2	pCMV-SPORT6	SalI, NotI	XhoI	SP6	BC040342.1	m
SLC38A3	SNAT3	pCMV-SPORT6	EcoRV, NotI	XhoI	SP6	BC042875.1	n
SLC38A4	SNAT4	pcDNA3.1(+)	NotI, XhoI	XhoI	T7	AB055003.1	o
SLC38A5	SNAT5	pSPORT1	EcoRI	AgeI	SP6	NM_033518.3	p
SLC3A2	4F2hc	pcDNA3.1(+)	HindIII, BamHI	XmaI	T7	AB018010.1	q
TMEM27	Collectrin	pcDNA3.1(+)	EcoRI, NotI	ApaI	T7	NM_020665.5	r
SLC3A1	rBAT	pcDNA3.1(+)	NotI, XhoI	XhoI	T7	AB033549.1	s

[1] Restriction enzyme sites used for subcloning cDNAs into each expression vector.

[2] LAT1 was cloned into the pcDNA40 vector by TOPO cloning.

[3] cDNA clone corresponding to AK313390.1 contained single nucleotide alteration compared with a functionally characterized sequence (Sloan J L, Mager S. *J Biol Chem.* 1999; 274: 23740-23745). Therefore, "G" at the nucleotide number 1652 of AK313390 has been converted to "A" by site-directed mutagenesis, so that Val-507 is changed to Ile to obtain the functionally characterized $ATB^{0,+}$.

[4] The references for each transporter are as follows:

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