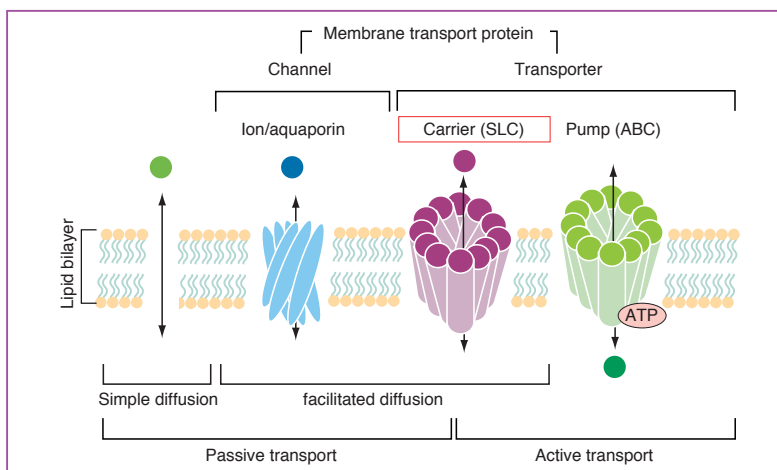
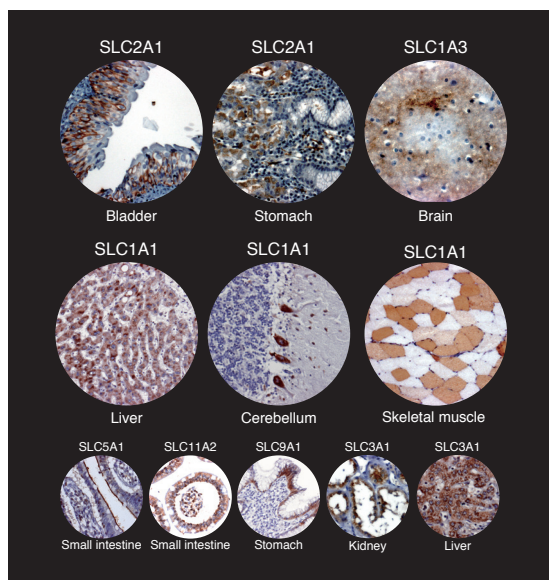


# Anti-SLC transporter antibody

**MBL**

For Research Use Only

- Useful for immunohistochemistry of Solute carrier (SLC) transporters in human tissues.
- High performance in WB, FCM, or IC is confirmed by using a transfectant expressing the full-length SLC.



## SLC transporters

Glucose, amino acid and other organic substances that are necessary for sustaining the living body have an affinity with water. Cells are equipped with membrane transport devices (transporters) that allow these water-soluble organic substances to pass effectively through biomembranes comprised of a lipid bilayer membrane. These membrane transporter proteins have substrate selectivity that is compatible with diverse water soluble substances, and it has been revealed that they comprise an extremely large family. Transporters are largely classified as pumps that utilize the energy of ATP hydrolysis (ATP binding cassette), and carriers responsible for facilitated diffusion without utilizing the ATP (Solute carriers). In human, 49 types of pump genes and about 400 types of SLC transporter genes have been identified. Transporters exist throughout the entire body, but are expressed highly in the liver, kidneys and other digestive systems and in the central nervous system in particular. Of the 52 SLC families, more than 50% are located in the kidneys, and abnormalities (gene mutations) of SLC transporters and their associated molecules are sometimes factors in the development of a number of renal diseases including renal tubular acidosis, cystinuria and hereditary renal glucosuria.

MBL is promoting the development of antibodies with a focus on the SLC transporters whose involvement to diseases have been suggested in research papers. By offering the market a high quality research tool, we contribute to the early cause investigation of transporter-associated diseases and the development of treatment targets.

SLC	Alias	Associated diseases
SLC1A1	EAAC1, EAAT3	Dicarboxylic acid aciduria
SLC1A2	GLT-1, EAAT2	Amyotrophic lateral sclerosis (ALS)
SLC2A1	GLUT1	Developmental disorder, microcephaly, hypotension
SLC2A2	GLUT2	Fanconi-Bickel Syndrome (FBS)
SLC3A1	rBAT, NBAT, D2	Cystinuria (I Type)
SLC4A1	AE1, Band3	Hemolytic anemia, distal tubule acidosis
SLC4A4	NBCe1, NBC, NBC1	Distal tubule acidosis
SLC4A7	NBCn1, NBC2, NBC3	Sight and hearing abnormality
SLC5A1	SGLT1	Glucose-galactose malabsorption
SLC5A2	SGLT2	Familial renal glucosuria
SLC5A5	NIS	Thyroid hormone abnormality
SLC6A1	GAT-1 (GABA)	Temper attack, schizophrenia
SLC6A2	NAT1, NET1 (dopamine)	Depression, rising intolerance, anorexia, cardiac circulation disorder
SLC6A3	DAT1 (dopamine)	Parkinson's syndrome, Tourette syndrome, attention deficit hyperactivity disorder (ADHD)
SLC6A4	SERT (Serotonin)	Anxiety, depression, autism, drug dependency, gastrointestinal disease
SLC6A6	TAUT (Taurine)	Taurine deficiency, retinopathy, retina development disorder
SLC6A8	CRTR (Creatine)	X-linked creatine deficiency disorder, mental retardation, skeletal muscle disease
SLC6A11	GAT3 (GABA)	Temper attack
SLC6A19	B <sup>+</sup> AT1, HND (amino acid)	Hartrup disease
SLC7A7	γ-LAT1	Lysinuric protein intolerance
SLC7A9	B <sup>0</sup> , AT	Cystinuria (type B)
SLC9A1	NHE1, APNH	Ischemia, recurrent disorders, essential hypertension, Diabetic blood vessel hyperplasia
SLC9A3	NHE3	Congenital secretory diarrhea
SLC10A2	ASBT, IBAT, ISBT	Primary bile acid malabsorption
SLC11A1	NRAMP1, NRAMP, LSH	Crohn's disease
SLC11A2	DMT1, NRAMP2, DCT1	Hereditary hemochromatosis
SLC12A1	NKCC2, BSC1	Barter syndrome (type I)
SLC12A3	NCC, TSC	Gitelman syndrome
SLC12A6	KCC3	Agenesis of the Corpus Callosum with Peripheral Neuropathy (ACCPN)
SLC14A2	UT-A1	Orthostatic hypotension
SLC16A1	MCT1	Muscle weakness (exercise intolerance)
SLC17A5	sialin	Sialic acid storage disease (Salla disease)
SLC18A2	VMAT2, SVAT, SVMT, VAT2	Drug dependence
SLC18A3	VACht	Myasthenic syndrome
SLC19A1	RFT, REC, FOLT	Methotrexate tolerance
SLC19A2	ThTr1, ThT1	Megaloblastic anemia
SLC19A3	ThTr2	Seizure susceptibility
SLC22A5	hOCTN2	Primary systemic carnitine deficiency (PCD)
SLC22A12	hURAT1	Cataplectic hypouricemia
SLC25A4	AAC1 (ADP/ATP carrier 1)	Progressive external ophthalmoplegia (AdPEO)
SLC25A8	UCP2 (uncoupling protein 2)	Type 2 diabetes mellitus
SLC25A9	UCP3 (uncoupling protein 3)	Obesity
SLC25A13	AGC2	Adult crisis type-II citrullinemia
SLC25A15	ORC1 (ornithine carrier 1)	HHH Syndrome
SLC25A19	DNC (deoxynucleotide carrier)	Microcephaly
SLC25A20	CAC	CACT coloboma
SLC26A2	DTDST	Achondroplasia
SLC26A3	DRA, CLD	Congenital chloride-losing diarrhea
SLC26A4	pendrin	Pendred syndrome (hereditary deafness accompanied by goiter)
SLC30A5	ZNT5	Osteodystrophy
SLC34A1	NaPi-IIa	Nephrolithiasis, osteoporosis
SLC35C1	GDP-Fuc transporter	Leukocyte-adhesion deficiency syndrome (type II)
SLC37A4	SPX4	Glycogenosis (non -1a type)
SLC39A4	ZIP4	Acrodermatitis enteropathica
SLC40A1	FPN1	Type 4 hemochromatosis

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<http://ruo.mbl.co.jp/>

## Product List

Code No.	Product Name	Size	Reactivity	Applications	Code No.	Product Name	Size	Reactivity	Applications
BMP007	Anti-SLC2A1 (GLUT1) (Human) pAb	100 µL	Hu	WB / IH	BMP058	Anti-SLC1A6 (EAAT4) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH
BMP008	Anti-SLC2A4 (GLUT4) (Human) pAb	100 µL	Hu	WB	BMP059	Anti-SLC4A3 (AE3) (Human) pAb	50 µL	Hu	FCM / IC / IH
BMP009	Anti-SLC1A3 (GLAST1/EAAT1) (Human) pAb	100 µL	Hu	WB / IH	BMP061	Anti-SLC9A9 (NHE9) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH
BMP010	Anti-SLC1A1 (EAAC1/EAAT3) (Human) pAb	100 µL	Hu	WB / IH	BMP062	Anti-SLC8A2 (NCX2) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH
BMP011	Anti-SLC7A5 (LAT1) (Human) pAb	100 µL	Hu	WB / IH	BMP063	Anti-SLC11A2 (DMT1) (Human) pAb	100 µL	Hu	FCM / IC / IH
BMP012	Anti-SLC4A1 (AE1) (Human) pAb	100 µL	Hu	WB / IH	BMP064	Anti-SLC22A12 (URAT1) (Human) pAb	50 µL	Hu	FCM / IC / IH
BMP013	Anti-SLC3A1 (rBAT) (Human) pAb	100 µL	Hu	WB / IH	BMP065	Anti-SLC22A13 (ORCTL3/OCTL1) (Human) pAb	50 µL	Hu	FCM / IC / IH
BMP014	Anti-SLC19A2 (THTR1) (Human) pAb	100 µL	Hu	WB / IH	BMP066	Anti-SLC29A2 (ENT2) (Human) pAb	50 µL	Hu	FCM / IC / IH
BMP015	Anti-SLC6A3 (DAT1) (Human) pAb	100 µL	Hu	WB / IH	BMP067	Anti-SLCO5A1 (SLC21A15/OATP5A1) (Human) pAb	50 µL	Hu	FCM / IC / IH
BMP016	Anti-SLC6A7 (PROT) (Human) pAb	50 µL	Hu	WB / IH	BMP068	Anti-SLCO6A1 (SLC21A19/OATP6A1) (Human) pAb	50 µL	Hu	FCM / IC / IH
BMP019	Anti-SLC7A7 (y <sup>+</sup> LAT1) (Human) pAb	50 µL	Hu	WB / IH	BMP069	Anti-SLC1A2 (EAAT2) (Human) pAb	100 µL	Hu	FCM / IC / IH
BMP021	Anti-SLC7A9 (B <sup>0+</sup> AT) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP070	Anti-SLC2A2 (GLUT2) (Human) pAb	100 µL	Hu	FCM / IH
BMP022	Anti-SLC5A1 (SGLT1) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP071	Anti-SLC4A10 (NCBE) (Human) pAb	100 µL	Hu	FCM / IC / IH
BMP023	Anti-SLC9A1 (NHE1) (Human) pAb	100 µL	Hu	WB / FCM / IC / IH	BMP072	Anti-SLC17A2 (NPT3) (Human) pAb	100 µL	Hu	FCM / IC / IH
BMP024	Anti-SLC1A7 (EAAT5) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH / Immuno-EM*	BMP073	Anti-SLC17A6 (VGLUT2) (Human) pAb	100 µL	Hu	WB / IH
BMP025	Anti-SLC2A11 (GLUT11) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP074	Anti-SLC5A9 (SGLT4) (Human) pAb	100 µL	Hu	FCM / IH
BMP026	Anti-SLC2A13 (HMIT) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP075	Anti-SLC9A2 (NHE2) (Human) pAb	100 µL	Hu	WB / IH
BMP027	Anti-SLC2A9 (GLUT9) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP076	Anti-SLC22A5 (OCTN2) (Human) pAb	100 µL	Hu	FCM / IC / IH
BMP028	Anti-SLC1A4 (ASCT1) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP077	Anti-SLC17A5 (Sialin) (Human) pAb	100 µL	Hu	FCM / IC / IH
BMP029	Anti-SLC6A2 (NET) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP078	Anti-SLC17A7 (VGLUT1) (Human) pAb	100 µL	Hu	FCM / IC / IH
BMP031	Anti-SLC16A2 (MCT8) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP079	Anti-SLC17A9 isoform 2 (VNUT) (Human) pAb	100 µL	Hu / Mo* / Rat*	FCM / IH
BMP032	Anti-SLC11A1 (NRANP1) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP080	Anti-SLC33A1 (AT1) (Human) pAb	100 µL	Hu	FCM / IC / IH
BMP033	Anti-SLC40A1 (FPN1) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP081	Anti-SLC38A2 (SNAT2) (Human) pAb	100 µL	Hu	WB / FCM / IC / IH
BMP034	Anti-SLC2A5 (GLUT5) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP082	Anti-SLC46A3 (Human) pAb	100 µL	Hu	FCM / IC / IH
BMP035	Anti-SLC2A8 (GLUT8) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP083	Anti-SLC26A6 (Pat-1) (Human) pAb	100 µL	Hu	FCM / IC / IH
BMP037	Anti-SLC5A11 (SMIT2) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP084	Anti-SLC26A7 (SUT2) (Human) pAb	100 µL	Hu	FCM / IC / IH
BMP038	Anti-SLC6A12 (BGT-1) (Human) pAb	100 µL	Hu	WB / IH	BMP085	Anti-SLC30A4 (ZnT-4) (Human) pAb	100 µL	Hu	FCM / IC / IH
BMP039	Anti-SLC7A1 (CAT1) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP086	Anti-SLC39A11 (ZIP11) (Human) pAb	100 µL	Hu	FCM / IC / IH
BMP040	Anti-SLC7A3 (CAT3) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP087	Anti-SLC26A11 (Human) pAb	100 µL	Hu	FCM / IC / IH
BMP041	Anti-SLC7A8 (LAT2) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP088	Anti-SLCO4A1 (SLC21A12/OATP4A1) (Human) pAb	100 µL	Hu	FCM / IC / IH
BMP042	Anti-SLC7A14 (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP089	Anti-SLC29A3 (ENT3) (Human) pAb	100 µL	Hu	FCM / IC / IH
BMP043	Anti-SLC9A7 (NHE7) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP090	Anti-SLC3A2 (CD98/4F2hc) (Human) pAb	100 µL	Hu	WB / FCM / IH
BMP045	Anti-SLC6A4 (SERT) (Human) pAb	50 µL	Hu	WB / IH	BMP091	Anti-SLC6A9 (GlyT1) (Human) pAb	100 µL	Hu	WB / FCM / IH
BMP046	Anti-SLC6A6 (TAUT) (Human) pAb	50 µL	Hu	FCM / IC / IH	BMP092	Anti-SLC19A3 (ThTr2) (Human) pAb	100 µL	Hu	WB / FCM / IH
BMP047	Anti-SLC6A8 (CRTR) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP093	Anti-SLC22A1 (OCT1) (Human) pAb	100 µL	Hu	WB / FCM / IH
BMP048	Anti-SLC18A3 (VAcHT) (Human) pAb	50 µL	Hu	FCM / IH	BMP094	Anti-SLC30A3 (ZNT3) (Human) pAb	100 µL	Hu	WB / FCM / IH
BMP049	Anti-SLC9A6 (NHE6) (Human) pAb	50 µL	Hu	FCM / IC / IH	BMP095	Anti-SLC38A5 (SNAT5) (Human) pAb	100 µL	Hu	WB / IH
BMP050	Anti-SLC6A15 (SBAT1) (Human) pAb	50 µL	Hu	FCM / IC / IH	BMP096	Anti-SLC38A7 (SNAT7) (Human) pAb	100 µL	Hu	WB / IH
BMP051	Anti-SLC6A13 (GAT2) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP097	Anti-SLC38A3 (SNAT3) (Human) pAb	100 µL	Hu	WB / IH
BMP052	Anti-SLC6A14 (ATB <sup>+</sup> ) (Human) pAb	50 µL	Hu	WB / FCM / IC / IH	BMP098	Anti-SLC43A1 (LAT3) (Human) pAb	100 µL	Hu	WB / IH
BMP053	Anti-SLC6A19 (B <sup>+</sup> AT1) (Human) pAb	50 µL	Hu	FCM / IC / IH	BMP099	Anti-SLC37A4 (G6PT1) (Human) pAb	100 µL	Hu	WB / IH
BMP054	Anti-SLC22A14 (ORCTL4/OCTL2) (Human) pAb	50 µL	Hu	FCM / IC / IH	BMP100	Anti-SLC22A8 (OAT3) (Human) pAb	100 µL	Hu	WB / IH
BMP055	Anti-SLC15A4 (PHT1) (Human) pAb	100 µL	Hu	FCM / IC / IH					
BMP056	Anti-SLC7A10 (Asc-1) (Human) pAb	100 µL	Hu	FCM / IC / IH					
BMP057	Anti-SLC7A4 (CAT4) (Human) pAb	50 µL	Hu	FCM / IC / IH					

Applications: WB: Western Blotting, IH: Immunohistochemistry, IC: Immunocytochemistry, FCM: Flow Cytometry, Immuno-EM: Immuno-electron microscopy

Reactivity: Hu: Human, Mo: Mouse

\*: Reported in a research article. (Not tested by MBL)

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