AR-C155858 is a potent inhibitor of monocarboxylate tra
binds to an intracellular site involving transmembrane

Biochemical Journal

425, 523-530

DOI: 10.1042/bj20091515

Citation Report

#	Article	IF	Citations
1	General requirement for harvesting antennae at Ca2+ and H+ channels and transporters. Frontiers in Neuroenergetics, 2010, 2, .	5.3	16
2	The inhibition of monocarboxylate transporter 2 (MCT2) by AR-C155858 is modulated by the associated ancillary protein. Biochemical Journal, 2010, 431, 217-225.	1.7	77
3	Metabolic Targeting of Lactate Efflux by Malignant Glioma Inhibits Invasiveness and Induces Necrosis: An In Vivo Study. Neoplasia, 2011, 13, 620-632.	2.3	157
4	Pyruvate imbalance mediates metabolic reprogramming and mimics lifespan extension by dietary restriction in <i>Caenorhabditis elegans</i>. Aging Cell, 2011, 10, 39-54.	3.0	74
5	Targeting hypoxia in cancer therapy. Nature Reviews Cancer, 2011, 11, 393-410.	12.8	2,607
6	Cytosolic H⁺ microdomain developed around AE1 during AE1â€mediated Cl^{âˆ’}/HCO₃^{âˆ’} exchange. Journal of Physiology, 2011, 589, 1551-1569.	1.3	28
7	CD147 subunit of lactate/H⁺symporters MCT1 and hypoxia-inducible MCT4 is critical for energetics and growth of glycolytic tumors. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 16663-16668.	3.3	370
8	Evidence for a stromal-epithelial â€œlactate shuttleâ€•in human tumors. Cell Cycle, 2011, 10, 1772-1783.	1.3	393
9	Using the â€œreverse Warburg effectâ€•to identify high-risk breast cancer patients. Cell Cycle, 2012, 11, 1108-1117.	1.3	224
10	Targeting the latest hallmark of cancer: another attempt at â€˜magic bulletâ€™ drugs targeting cancersâ€™ metabolic phenotype. Future Oncology, 2012, 8, 1315-1330.	1.1	20
11	Genomeâ€wide RNA interference analysis of renal carcinoma survival regulators identifies MCT4 as a Warburg effect metabolic target. Journal of Pathology, 2012, 227, 146-156.	2.1	92
12	Anticancer Agents That Counteract Tumor Glycolysis. ChemMedChem, 2012, 7, 1318-1350.	1.6	137
13	Role of monocarboxylate transporters in human cancers: state of the art. Journal of Bioenergetics and Biomembranes, 2012, 44, 127-139.	1.0	330
14	Synthesis and pharmacological evaluation of carboxycoumarins as a new antitumor treatment targeting lactate transport in cancer cells. Bioorganic and Medicinal Chemistry, 2013, 21, 7107-7117.	1.4	56
15	Biology â€“ cancer metabolic phenotype. , 2013, , 15-138.		2
16	The SLC16 gene family â€“ Structure, role and regulation in health and disease. Molecular Aspects of Medicine, 2013, 34, 337-349.	2.7	526
17	Monocarboxylic Acid Transport. , 2013, 3, 1611-1643.		274
18	CD147 regulates the expression of MCT1 and lactate export in multiple myeloma cells. Cell Cycle, 2013, 12, 3364-3372.	1.3	66

#	Article	IF	Citations
19	DNA Methylation of the <i>SLC16A3</i> Promoter Regulates Expression of the Human Lactate Transporter MCT4 in Renal Cancer with Consequences for Clinical Outcome. Clinical Cancer Research, 2013, 19, 5170-5181.	3.2	90
20	The Monocarboxylate Transporter Inhibitor Î±-Cyano-4-Hydroxycinnamic Acid Disrupts Rat Lung Branching. Cellular Physiology and Biochemistry, 2013, 32, 1845-1856.	1.1	17
21	Targeting lactate metabolism for cancer therapeutics. Journal of Clinical Investigation, 2013, 123, 3685-3692.	3.9	809
22	Crucial Residue Involved in L-Lactate Recognition by Human Monocarboxylate Transporter 4 (hMCT4). PLoS ONE, 2013, 8, e67690.	1.1	30
23	The Retinal Pigment Epithelium Utilizes Fatty Acids for Ketogenesis. Journal of Biological Chemistry, 2014, 289, 20570-20582.	1.6	136
24	Monocarboxylate transporter mediated uptake of moxifloxacin on human retinal pigmented epithelium cells. Journal of Pharmacy and Pharmacology, 2014, 66, 574-583.	1.2	11
25	Neurogenesis and vascularization of the damaged brain using a lactate-releasing biomimetic scaffold. Biomaterials, 2014, 35, 4769-4781.	5.7	90
26	Antitumor Activity of 7-Aminocarboxycoumarin Derivatives, a New Class of Potent Inhibitors of Lactate Influx but Not Efflux. Molecular Cancer Therapeutics, 2014, 13, 1410-1418.	1.9	88
27	Inhibition of Monocarboxylate Transporter-1 (MCT1) by AZD3965 Enhances Radiosensitivity by Reducing Lactate Transport. Molecular Cancer Therapeutics, 2014, 13, 2805-2816.	1.9	135
28	Rapid uptake of glucose and lactate, and not hypoxia, induces apoptosis in three-dimensional tumor tissue culture. Integrative Biology (United Kingdom), 2014, 6, 399-410.	0.6	36
29	Emerging approaches to target tumor metabolism. Current Opinion in Pharmacology, 2014, 17, 22-29.	1.7	18
30	Synthesis and Structureâ€“Activity Relationships of Pteridine Dione and Trione Monocarboxylate Transporter 1 Inhibitors. Journal of Medicinal Chemistry, 2014, 57, 7317-7324.	2.9	46
31	Lactate Regulates Metabolic and Pro-inflammatory Circuits in Control of T Cell Migration and Effector Functions. PLoS Biology, 2015, 13, e1002202.	2.6	489
32	In Vitro and In Vivo Evidence for Active Brain Uptake of the GHB Analog HOCPCA by the Monocarboxylate Transporter Subtype 1. Journal of Pharmacology and Experimental Therapeutics, 2015, 354, 166-174.	1.3	16
33	Preparation of tetrasubstituted pyrimido[4,5-d]pyrimidine diones. Tetrahedron Letters, 2015, 56, 1949-1952.	0.7	14
34	A Novel Monocarboxylate Transporter Inhibitor as a Potential Treatment Strategy for Î³-Hydroxybutyric Acid Overdose. Pharmaceutical Research, 2015, 32, 1894-1906.	1.7	24
35	Identification of key binding site residues of MCT1 for AR-C155858 reveals the molecular basis of its isoform selectivity. Biochemical Journal, 2015, 466, 177-188.	1.7	35
36	Channel-Mediated Lactate Release by K⁺-Stimulated Astrocytes. Journal of Neuroscience, 2015, 35, 4168-4178.	1.7	163

#	Article	IF	Citations
37	The cytotoxicity of 3-bromopyruvate in breast cancer cells depends on extracellular pH. Biochemical Journal, 2015, 467, 247-258.	1.7	30
38	3-BrPA eliminates human bladder cancer cells with highly oncogenic signatures via engagement of specific death programs and perturbation of multiple signaling and metabolic determinants. Molecular Cancer, 2015, 14, 135.	7.9	32
39	Monitoring Mitochondrial Pyruvate Carrier Activity in Real Time Using a BRET-Based Biosensor: Investigation of the Warburg Effect. Molecular Cell, 2015, 59, 491-501.	4.5	76
40	NH4+ triggers the release of astrocytic lactate via mitochondrial pyruvate shunting. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11090-11095.	3.3	67
41	Research into cancer metabolomics: Towards a clinical metamorphosis. Seminars in Cell and Developmental Biology, 2015, 43, 52-64.	2.3	36
42	Lactate Transport and Signaling in the Brain: Potential Therapeutic Targets and Roles in Bodyâ€"Brain Interaction. Journal of Cerebral Blood Flow and Metabolism, 2015, 35, 176-185.	2.4	189
43	Lactate Contribution to the Tumor Microenvironment: Mechanisms, Effects on Immune Cells and Therapeutic Relevance. Frontiers in Immunology, 2016, 7, 52.	2.2	364
44	13C MRS and LCâ€"MS Flux Analysis of Tumor Intermediary Metabolism. Frontiers in Oncology, 2016, 6, 135.	1.3	23
45	MCT4 as a potential therapeutic target for metastatic gastric cancer with peritoneal carcinomatosis. Oncotarget, 2016, 7, 43492-43503.	0.8	45
46	Monocarboxylate Transporters MCT1 and MCT4 Regulate Migration and Invasion of Pancreatic Ductal Adenocarcinoma Cells. Pancreas, 2016, 45, 1036-1047.	0.5	66
47	Hyperglycaemia and Pseudomonas aeruginosa acidify cystic fibrosis airway surface liquid by elevating epithelial monocarboxylate transporter 2 dependent lactate-H+ secretion. Scientific Reports, 2016, 6, 37955.	1.6	48
48	Reexamining cancer metabolism: lactate production for carcinogenesis could be the purpose and explanation of the Warburg Effect. Carcinogenesis, 2017, 38, bgw127.	1.3	383
49	The anti-tumour agent lonidamine is a potent inhibitor of the mitochondrial pyruvate carrier and plasma membrane monocarboxylate transporters. Biochemical Journal, 2016, 473, 929-936.	1.7	93
50	Metabolism in Cancer. Recent Results in Cancer Research, 2016, , .	1.8	5
51	The Role of pH Regulation in Cancer Progression. Recent Results in Cancer Research, 2016, 207, 93-134.	1.8	13
52	Monocarboxylate transporters in the brain and in cancer. Biochimica Et Biophysica Acta - Molecular Cell Research, 2016, 1863, 2481-2497.	1.9	291
53	The<i>MCT4</i>Gene: A Novel, Potential Target for Therapy of Advanced Prostate Cancer. Clinical Cancer Research, 2016, 22, 2721-2733.	3.2	84
54	Targeting of astrocytic glucose metabolism by beta-hydroxybutyrate. Journal of Cerebral Blood Flow and Metabolism, 2016, 36, 1813-1822.	2.4	54

#	Article	IF	Citations
55	Hypoxia, cancer metabolism and the therapeutic benefit of targeting lactate/H+ symporters. Journal of Molecular Medicine, 2016, 94, 155-171.	1.7	233
56	Embigin is overexpressed in pancreatic ductal adenocarcinoma and regulates cell motility through epithelial to mesenchymal transition via the TGF-Î² pathway. Molecular Carcinogenesis, 2016, 55, 633-645.	1.3	19
57	Value of pH regulators in the diagnosis, prognosis and treatment of cancer. Seminars in Cancer Biology, 2017, 43, 17-34.	4.3	78
58	Identification of novel inhibitors of the amino acid transporter B⁰AT1 (SLC6A19), a potential target to induce protein restriction and to treat type 2 diabetes. British Journal of Pharmacology, 2017, 174, 468-482.	2.7	48
59	The flexible cytoplasmic loop 3 contributes to the substrate affinity of human monocarboxylate transporters. Biochimica Et Biophysica Acta - Biomembranes, 2017, 1859, 1790-1795.	1.4	10
60	The Glia-Neuron Lactate Shuttle and Elevated ROS Promote Lipid Synthesis in Neurons and Lipid Droplet Accumulation in Glia via APOE/D. Cell Metabolism, 2017, 26, 719-737.e6.	7.2	333
61	Molecular Characteristics, Regulation, and Function of Monocarboxylate Transporters. Advances in Neurobiology, 2017, 16, 255-267.	1.3	14
62	Neuronal Stimulation Triggers Neuronal Glycolysis and Not Lactate Uptake. Cell Metabolism, 2017, 26, 361-374.e4.	7.2	327
63	Reduction of epileptiform activity in ketogenic mice: The role of monocarboxylate transporters. Scientific Reports, 2017, 7, 4900.	1.6	18
64	The role of succinate and ROS in reperfusion injury â€" A critical appraisal. Journal of Molecular and Cellular Cardiology, 2017, 110, 1-14.	0.9	133
65	Type 2 Diabetes Variants Disrupt Function of SLC16A11 through Two Distinct Mechanisms. Cell, 2017, 170, 199-212.e20.	13.5	121
66	Shortâ€Chain Fatty Acid Transporters: Role in Colonic Homeostasis. , 2017, 8, 299-314.		176
67	d(âˆ') Lactic Acid-Induced Adhesion of Bovine Neutrophils onto Endothelial Cells Is Dependent on Neutrophils Extracellular Traps Formation and CD11b Expression. Frontiers in Immunology, 2017, 8, 975.	2.2	53
68	Pre-clinical pharmacology of AZD3965, a selective inhibitor of MCT1: DLBCL, NHL and Burkittâ€™s lymphoma anti-tumor activity. Oncotarget, 2017, 8, 69219-69236.	0.8	109
69	MCT4 Expression Is a Potential Therapeutic Target in Colorectal Cancer with Peritoneal Carcinomatosis. Molecular Cancer Therapeutics, 2018, 17, 838-848.	1.9	36
70	Interruption of lactate uptake by inhibiting mitochondrial pyruvate transport unravels direct antitumor and radiosensitizing effects. Nature Communications, 2018, 9, 1208.	5.8	124
71	The Science and Translation of Lactate Shuttle Theory. Cell Metabolism, 2018, 27, 757-785.	7.2	687
72	Glucose and lactate as metabolic constraints on presynaptic transmission at an excitatory synapse. Journal of Physiology, 2018, 596, 1699-1721.	1.3	30

#	Article	IF	Citations
73	Chaski, a novel Drosophila lactate/pyruvate transporter required in glia cells for survival under nutritional stress. Scientific Reports, 2018, 8, 1186.	1.6	38
74	Glucose-dependent growth arrest of leukemia cells by MCT1 inhibition: Feeding Warburgâ€™s sweet tooth and blocking acid export as an anticancer strategy. Biomedicine and Pharmacotherapy, 2018, 98, 173-179.	2.5	13
75	Amino Acid Transporters as Disease Modifiers and Drug Targets. SLAS Discovery, 2018, 23, 303-320.	1.4	41
76	Dual Inhibition of the Lactate Transporters MCT1 and MCT4 Is Synthetic Lethal with Metformin due to NAD+ Depletion in Cancer Cells. Cell Reports, 2018, 25, 3047-3058.e4.	2.9	236
77	Detection of Chemical Engagement of Solute Carrier Proteins by a Cellular Thermal Shift Assay. ACS Chemical Biology, 2018, 13, 1480-1486.	1.6	37
78	Targeting Metabolic Cross Talk between Cancer Cells and Cancer-Associated Fibroblasts. Advances in Experimental Medicine and Biology, 2018, 1063, 167-178.	0.8	26
79	Actionable Metabolic Pathways in Heart Failure and Cancerâ€"Lessons From Cancer Cell Metabolism. Frontiers in Cardiovascular Medicine, 2018, 5, 71.	1.1	19
80	A surface proton antenna in carbonic anhydrase II supports lactate transport in cancer cells. ELife, 2018, 7, .	2.8	53
81	Preclinical Efficacy of the Novel Monocarboxylate Transporter 1 Inhibitor BAY-8002 and Associated Markers of Resistance. Molecular Cancer Therapeutics, 2018, 17, 2285-2296.	1.9	67
82	Lactate Induces Pro-tumor Reprogramming in Intratumoral Plasmacytoid Dendritic Cells. Frontiers in Immunology, 2019, 10, 1878.	2.2	85
83	Monocarboxylate transporter 1 and monocarboxylate transporter 4 in cancer-endothelial co-culturing microenvironments promote proliferation, migration, and invasion of renal cancer cells. Cancer Cell International, 2019, 19, 170.	1.8	25
84	Monocarboxylate transporter 4 (MCT4) is a high affinity transporter capable of exporting lactate in high-lactate microenvironments. Journal of Biological Chemistry, 2019, 294, 20135-20147.	1.6	115
85	A Nonradioactive High-Throughput Screening-Compatible Cell-Based Assay to Identify Inhibitors of the Monocarboxylate Transporter Protein 1. Assay and Drug Development Technologies, 2019, 17, 275-284.	0.6	9
86	Lactate mediates the effects of exercise on learning and memory through SIRT1-dependent activation of hippocampal brain-derived neurotrophic factor (BDNF). Journal of Neuroscience, 2019, 39, 1661-18.	1.7	220
87	Mechanistic basis of L-lactate transport in the SLC16 solute carrier family. Nature Communications, 2019, 10, 2649.	5.8	69
88	Homology modeling and site-directed mutagenesis identify amino acid residues underlying the substrate selection mechanism of human monocarboxylate transporters 1 (hMCT1) and 4 (hMCT4). Cellular and Molecular Life Sciences, 2019, 76, 4905-4921.	2.4	10
89	Treatment of <i>Î³</i>-Hydroxybutyric Acid and <i>Î³</i>-Butyrolactone Overdose with Two Potent Monocarboxylate Transporter 1 Inhibitors, AZD3965 and AR-C155858. Journal of Pharmacology and Experimental Therapeutics, 2019, 370, 84-91.	1.3	13
90	Short chain fatty acid butyrate uptake reduces expressions of prostanoid EP4 receptors and their mediation of cyclooxygenase-2 induction in HCA-7 human colon cancer cells. European Journal of Pharmacology, 2019, 853, 308-315.	1.7	16

#	Article	IF	Citations
91	Transport of 2,4-dichloro phenoxyacetic acid by human Na+-coupled monocarboxylate transporter 1 (hSMCT1, SLC5A8). Drug Metabolism and Pharmacokinetics, 2019, 34, 95-103.	1.1	4
92	In Vitro and In Vivo Efficacy of the Monocarboxylate Transporter 1 Inhibitor AR-C155858 in the Murine 4T1 Breast Cancer Tumor Model. AAPS Journal, 2019, 21, 3.	2.2	36
93	Cellular Uptake of MCT1 Inhibitors AR-C155858 and AZD3965 and Their Effects on MCT-Mediated Transport of L-Lactate in Murine 4T1 Breast Tumor Cancer Cells. AAPS Journal, 2019, 21, 13.	2.2	58
94	Monocarboxylate transporters in cancer. Molecular Metabolism, 2020, 33, 48-66.	3.0	346
95	CAIX forms a transport metabolon with monocarboxylate transporters in human breast cancer cells. Oncogene, 2020, 39, 1710-1723.	2.6	35
96	Solute carrier transporters: the metabolic gatekeepers of immune cells. Acta Pharmaceutica Sinica B, 2020, 10, 61-78.	5.7	115
97	The Î³-hydroxybutyric acid (GHB) analogue NCS-382 is a substrate for both monocarboxylate transporters subtypes 1 and 4. European Journal of Pharmaceutical Sciences, 2020, 143, 105203.	1.9	4
98	Acidosis-induced metabolic reprogramming in tumor cells enhances the anti-proliferative activity of the PDK inhibitor dichloroacetate. Cancer Letters, 2020, 470, 18-28.	3.2	16
99	Î²OHB Protective Pathways in Aralar-KO Neurons and Brain: An Alternative to Ketogenic Diet. Journal of Neuroscience, 2020, 40, 9293-9305.	1.7	18
100	Lactate Exposure Promotes Immunosuppressive Phenotypes in Innate Immune Cells. Cellular and Molecular Bioengineering, 2020, 13, 541-557.	1.0	28
101	D-Lactate Increases Cytokine Production in Bovine Fibroblast-Like Synoviocytes via MCT1 Uptake and the MAPK, PI3K/Akt, and NFÎºB Pathways. Animals, 2020, 10, 2105.	1.0	13
102	Monocarboxylate Transporter 4 Is a Therapeutic Target in Non-small Cell Lung Cancer with Aerobic Glycolysis Preference. Molecular Therapy - Oncolytics, 2020, 18, 189-201.	2.0	22
103	Heteromeric Solute Carriers: Function, Structure, Pathology and Pharmacology. Advances in Experimental Medicine and Biology, 2020, 21, 13-127.	0.8	29
104	Introduction of Scaffold Nitrogen Atoms Renders Inhibitors of the Malarial l-Lactate Transporter, PfFNT, Effective against the Gly107Ser Resistance Mutation. Journal of Medicinal Chemistry, 2020, 63, 9731-9741.	2.9	12
105	Cooperative transport mechanism of human monocarboxylate transporter 2. Nature Communications, 2020, 11, 2429.	5.8	33
106	New horizons on pH regulators as cancer biomarkers and targets for pharmacological intervention. , 2020, , 417-450.		1
107	Targeting lactate production and efflux in prostate cancer. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2020, 1866, 165894.	1.8	17
108	The tortuous path of lactate shuttle discovery: From cinders and boards to the lab and ICU. Journal of Sport and Health Science, 2020, 9, 446-460.	3.3	32

#	Article	IF	Citations
109	Defective Mitochondrial Pyruvate Flux Affects Cell Bioenergetics in Alzheimerâ€™s Disease-Related Models. Cell Reports, 2020, 30, 2332-2348.e10.	2.9	67
110	Impairment of Glycolysis-Derived l-Serine Production in Astrocytes Contributes to Cognitive Deficits in Alzheimerâ€™s Disease. Cell Metabolism, 2020, 31, 503-517.e8.	7.2	160
111	Lactic acid and its transport system. , 2020, , 99-123.		0
112	Monocarboxylate transporter 1 and 4 inhibitors as potential therapeutics for treating solid tumours: A review with structure-activity relationship insights. European Journal of Medicinal Chemistry, 2020, 199, 112393.	2.6	55
113	Stress gates an astrocytic energy reservoir to impair synaptic plasticity. Nature Communications, 2020, 11, 2014.	5.8	89
114	Metabolic interventions: A new insight into the cancer immunotherapy. Archives of Biochemistry and Biophysics, 2021, 697, 108659.	1.4	8
115	SLC16 Family: From Atomic Structure to Human Disease. Trends in Biochemical Sciences, 2021, 46, 28-40.	3.7	15
116	Synthesis and anticancer activity of new coumarin-3-carboxylic acid derivatives as potential lactate transport inhibitors. Bioorganic and Medicinal Chemistry, 2021, 29, 115870.	1.4	20
117	Structural basis of human monocarboxylate transporter 1 inhibition by anti-cancer drug candidates. Cell, 2021, 184, 370-383.e13.	13.5	143
118	Targeting Lactate Metabolism by Inhibiting MCT1 or MCT4 Impairs Leukemic Cell Proliferation, Induces Two Different Related Death-Pathways and Increases Chemotherapeutic Sensitivity of Acute Myeloid Leukemia Cells. Frontiers in Oncology, 2020, 10, 621458.	1.3	29
119	Efflux pumps, NHE1, monocarboxylate transporters, and ABC transporter subfamily inhibitors. , 2021, , 95-120.		0
120	Î³-Hydroxybutyric Acid: Pharmacokinetics, Pharmacodynamics, and Toxicology. AAPS Journal, 2021, 23, 22.	2.2	34
123	A Holistic Evolutionary and 3D Pharmacophore Modelling Study Provides Insights into the Metabolism, Function, and Substrate Selectivity of the Human Monocarboxylate Transporter 4 (hMCT4). International Journal of Molecular Sciences, 2021, 22, 2918.	1.8	4
124	Recent developments of human monocarboxylate transporter (hMCT) inhibitors as anticancer agents. Drug Discovery Today, 2021, 26, 836-844.	3.2	12
125	Cysteine 159 delineates a hinge region of the alternating access monocarboxylate transporterÂ1 and is targeted by cysteineâ€modifying inhibitors. FEBS Journal, 2021, 288, 6052-6062.	2.2	7
126	Toxicokinetic/Toxicodynamic Interaction Studies in Rats between the Drugs of Abuse Î³-Hydroxybutyric Acid and Ketamine and Treatment Strategies for Overdose. Pharmaceutics, 2021, 13, 741.	2.0	2
127	Bioelectronic Measurement of Target Engagement to a Membrane-Bound Transporter. SLAS Discovery, 2021, 26, 1004-1013.	1.4	1
128	Matrix Stiffness Modulates Metabolic Interaction between Human Stromal and Breast Cancer Cells to Stimulate Epithelial Motility. Metabolites, 2021, 11, 432.	1.3	8

#	Article	IF	Citations
129	Lactate sensing mechanisms in arterial chemoreceptor cells. Nature Communications, 2021, 12, 4166.	5.8	38
130	Role of monocarboxylate transporters in head and neck squamous cell carcinoma. Life Sciences, 2021, 279, 119709.	2.0	8
131	Novel strategies to improve tumour therapy by targeting the proteins MCT1, MCT4 and LAT1. European Journal of Medicinal Chemistry, 2021, 226, 113806.	2.6	16
132	Targeting Metabolic Cross Talk Between Cancer Cells and Cancer-Associated Fibroblasts. Advances in Experimental Medicine and Biology, 2021, 1311, 205-214.	0.8	18
133	Lactate and Lactate Transporters as Key Players in the Maintenance of the Warburg Effect. Advances in Experimental Medicine and Biology, 2020, 1219, 51-74.	0.8	37
134	Carbonic Anhydrases and Their Interplay with Acid/Base-Coupled Membrane Transporters. Sub-Cellular Biochemistry, 2014, 75, 105-134.	1.0	43
136	A Genetically Encoded FRET Lactate Sensor and Its Use To Detect the Warburg Effect in Single Cancer Cells. PLoS ONE, 2013, 8, e57712.	1.1	291
137	Imaging Mitochondrial Flux in Single Cells with a FRET Sensor for Pyruvate. PLoS ONE, 2014, 9, e85780.	1.1	160
138	Physiological Concentration of Exogenous Lactate Reduces Antimycin A Triggered Oxidative Stress in Intestinal Epithelial Cell Line IPEC-1 and IPEC-J2 In Vitro. PLoS ONE, 2016, 11, e0153135.	1.1	26
139	Monocarboxylate transporters as targets and mediators in cancer therapy response. Histology and Histopathology, 2014, 29, 1511-24.	0.5	87
140	Characterization of acetate transport in colorectal cancer cells and potential therapeutic implications. Oncotarget, 2016, 7, 70639-70653.	0.8	37
141	CD147: a small molecule transporter ancillary protein at the crossroad of multiple hallmarks of cancer and metabolic reprogramming. Oncotarget, 2017, 8, 6742-6762.	0.8	36
142	Radiosynthesis and validation of (Â±)-[18F]-3-fluoro-2-hydroxypropionate ([18F]-FLac) as a PET tracer of lactate to monitor MCT1-dependent lactate uptake in tumors. Oncotarget, 2017, 8, 24415-24428.	0.8	25
143	Mitochondria as new therapeutic targets for eradicating cancer stem cells: Quantitative proteomics and functional validation via MCT1/2 inhibition. Oncotarget, 2014, 5, 11029-11037.	0.8	181
144	Role of Monocarboxylate Transporters in Drug Delivery to the Brain. Current Pharmaceutical Design, 2014, 20, 1487-1498.	0.9	270
145	Monocarboxylate Transporter 1 in Brain Diseases and Cancers. Current Drug Metabolism, 2019, 20, 855-866.	0.7	4
146	Monitoring ATP dynamics in electrically active white matter tracts. ELife, 2017, 6, .	2.8	102
147	GEM-IL: A highly responsive fluorescent lactate indicator. Cell Reports Methods, 2021, 1, 100092.	1.4	17

#	Article	IF	Citations
148	Protein lactylation induced by neural excitation. Cell Reports, 2021, 37, 109820.	2.9	110
149	3-Bromopyruvate-mediated MCT1-dependent metabolic perturbation sensitizes triple negative breast cancer cells to ionizing radiation. Cancer & Metabolism, 2021, 9, 37.	2.4	11
150	Glial Glutamate and Metabolic Transporters as a Target for Neurodegenerative Therapy and Biomarkers. , 2014, , 61-88.		0
155	An overview of MCT1 and MCT4 in GBM: small molecule transporters with large implications. American Journal of Cancer Research, 2018, 8, 1967-1976.	1.4	33
157	Visual analysis on the research of monocarboxylate transporters based on CiteSpace. Medicine (United States), 2021, 100, e27466.	0.4	3
158	Citrin mediated metabolic rewiring in response to altered basal subcellular Ca2+ homeostasis. Communications Biology, 2022, 5, 76.	2.0	6
159	Resistance to antiangiogenic treatments: A review. , 2022, , 147-197.		1
160	Monocarboxylate Transporter 1 (MCT1) Mediates Succinate Export in the Retina. , 2022, 63, 1.		11
161	Metabolic tricks of cancer cells. Biochimica Et Biophysica Acta: Reviews on Cancer, 2022, 1877, 188705.	3.3	33
163	A Ca²⁺-Dependent Mechanism Boosting Glycolysis and OXPHOS by Activating Aralar-Malate-Aspartate Shuttle, upon Neuronal Stimulation. Journal of Neuroscience, 2022, 42, 3879-3895.	1.7	18
165	Therapeutic Options in Neuro-Oncology. International Journal of Molecular Sciences, 2022, 23, 5351.	1.8	8
166	NADH-independent enzymatic assay to quantify extracellular and intracellular L-lactate levels. STAR Protocols, 2022, 3, 101403.	0.5	1
167	Inhibiting Succinate Release Worsens Cardiac Reperfusion Injury by Enhancing Mitochondrial Reactive Oxygen Species Generation. Journal of the American Heart Association, 2022, 11, .	1.6	13
168	MOG analogues to explore the MCT2 pharmacophore, Î±-ketoglutarate biology and cellular effects of N-oxalylglycine. Communications Biology, 2022, 5, .	2.0	2
169	Lactic Acid Regulation: A Potential Therapeutic Option in Rheumatoid Arthritis. Journal of Immunology Research, 2022, 2022, 1-11.	0.9	2
170	Structural aspects of the glucose and monocarboxylate transporters involved in the Warburg effect. IUBMB Life, 2022, 74, 1180-1199.	1.5	5
173	Reconstructed Genome-Scale Metabolic Model Characterizes Adaptive Metabolic Flux Changes in Peripheral Blood Mononuclear Cells in Severe COVID-19 Patients. International Journal of Molecular Sciences, 2022, 23, 12400.	1.8	0
174	Single-Fluorophore Indicator to Explore Cellular and Sub-cellular Lactate Dynamics. ACS Sensors, 2022, 7, 3278-3286.	4.0	8

#	Article	IF	Citations
176	Imaging of lactate metabolism in retinal MÃ¼ller cells with a FRET nanosensor. Experimental Eye Research, 2023, 226, 109352.	1.2	5
178	Local Attraction of Substrates and Co-Substrates Enhances Weak Acid and Base Transmembrane Transport. Biomolecules, 2022, 12, 1794.	1.8	0
179	Proton-coupled monocarboxylate transporters in cancer: From metabolic crosstalk, immunosuppression and anti-apoptosis to clinical applications. Frontiers in Cell and Developmental Biology, 0, 10, .	1.8	6
180	Lactate-dependent chaperone-mediated autophagy induces oscillatory HIF-1Î± activity promoting proliferation of hypoxic cells. Cell Systems, 2022, 13, 1048-1064.e7.	2.9	10
181	Spinal Astrocyte-Neuron Lactate Shuttle Contributes to the Pituitary Adenylate Cyclase-Activating Polypeptide/PAC1 Receptor-Induced Nociceptive Behaviors in Mice. Biomolecules, 2022, 12, 1859.	1.8	1
182	Consumption and Metabolism of Extracellular Pyruvate by Cultured Rat Brain Astrocytes. Neurochemical Research, 2023, 48, 1438-1454.	1.6	10
183	Lactate as a myokine and exerkine: drivers and signals of physiology and metabolism. Journal of Applied Physiology, 2023, 134, 529-548.	1.2	27
184	Targeting monocarboxylate transporters (MCTs) in cancer: How close are we to the clinics?. Seminars in Cancer Biology, 2023, 90, 1-14.	4.3	20
185	Tumor lactic acid: a potential target for cancer therapy. Archives of Pharmacal Research, 2023, 46, 90-110.	2.7	8
186	Deficits in mitochondrial TCA cycle and OXPHOS precede rod photoreceptor degeneration during chronic HIF activation. Molecular Neurodegeneration, 2023, 18, .	4.4	3
187	Astrocytic aerobic glycolysis provides lactate to support neuronal oxidative metabolism in the hippocampus. BioFactors, 2023, 49, 875-886.	2.6	1
188	Pyruvate-conjugation of PEGylated liposomes for targeted drug delivery to retinal photoreceptors. Biomedicine and Pharmacotherapy, 2023, 163, 114717.	2.5	3
193	CRYO-EM AND SLC TRANSPORTERS. Medicinal Chemistry Reviews, 0, , 489-512.	0.1	0