Cellular selectivity of AAV serotypes for gene delivery i neonatal intracerebroventricular injection

PLoS ONE

12, e0188830

DOI: 10.1371/journal.pone.0188830

Citation Report

#	Article	IF	Citations
1	High Content, Phenotypic Assays and Screens for Compounds Modulating Cellular Processes in Primary Neurons. Methods in Enzymology, 2018, 610, 219-250.	0.4	7
2	Neuro-Immuno-Gene- and Genome-Editing-Therapy for Alzheimerâ€™s Disease: Are We There Yet?. Journal of Alzheimer's Disease, 2018, 65, 321-344.	1.2	17
3	Glucose-Dependent Insulinotropic Polypeptide Receptor-Expressing Cells in the Hypothalamus Regulate Food Intake. Cell Metabolism, 2019, 30, 987-996.e6.	7.2	171
4	Gene Therapy Tools for Brain Diseases. Frontiers in Pharmacology, 2019, 10, 724.	1.6	131
5	Fetal gene therapy for neurodegenerative lysosomal storage diseases. Journal of Inherited Metabolic Disease, 2019, 42, 391-393.	1.7	2
6	Viral delivery of a microRNA to Gba to the mouse central nervous system models neuronopathic Gaucher disease. Neurobiology of Disease, 2019, 130, 104513.	2.1	9
7	Targeting microglia with lentivirus and AAV: Recent advances and remaining challenges. Neuroscience Letters, 2019, 707, 134310.	1.0	89
8	Adeno-Associated Virus Technologies and Methods for Targeted Neuronal Manipulation. Frontiers in Neuroanatomy, 2019, 13, 93.	0.9	139
9	dCas9-Based Scn1a Gene Activation Restores Inhibitory Interneuron Excitability and Attenuates Seizures in Dravet Syndrome Mice. Molecular Therapy, 2020, 28, 235-253.	3.7	135
10	Towards Cell and Subtype Resolved Functional Organization: Mouse as a Model for the Cortical Control of Movement. Neuroscience, 2020, 450, 151-160.	1.1	6
11	Efficient Strategies for Microglia Replacement in the Central Nervous System. Cell Reports, 2020, 32, 108041.	2.9	68
12	Astrocyte-specific deletion of the transcription factor Yin Yang 1 in murine substantia nigra mitigates manganese-induced dopaminergic neurotoxicity. Journal of Biological Chemistry, 2020, 295, 15662-15676.	1.6	28
13	CNS Transduction Benefits of AAV-PHP.eB over AAV9 Are Dependent on Administration Route and Mouse Strain. Molecular Therapy - Methods and Clinical Development, 2020, 19, 447-458.	1.8	71
14	Direct evidence for transport of RNA from the mouse brain to the germline and offspring. BMC Biology, 2020, 18, 45.	1.7	18
15	Cerebral Organoids: A Human Model for AAV Capsid Selection and Therapeutic Transgene Efficacy in the Brain. Molecular Therapy - Methods and Clinical Development, 2020, 18, 167-175.	1.8	22
16	Optical monitoring of glutamate release at multiple synapses in situ detects changes following LTP induction. Molecular Brain, 2020, 13, 39.	1.3	20
17	CRISPR/Cas9 Editing: Sparking Discussion on Safety in Light of the Need for New Therapeutics. Human Gene Therapy, 2020, 31, 794-807.	1.4	2
18	Glucose metabolism links astroglial mitochondria to cannabinoid effects. Nature, 2020, 583, 603-608.	13.7	169

#	Article	IF	Citations
19	An ultra-stable cytoplasmic antibody engineered for in vivo applications. Nature Communications, 2020, 11, 336.	5.8	22
20	Emerging technologies to study glial cells. Glia, 2020, 68, 1692-1728.	2.5	32
21	Systemic administration of AAV-Slc25a46 mitigates mitochondrial neuropathy in Slc25a46â^'/â^' mice. Human Molecular Genetics, 2020, 29, 649-661.	1.4	19
22	Sensing Senses: Optical Biosensors to Study Gustation. Sensors, 2020, 20, 1811.	2.1	8
23	A viral toolkit for recording transcription factorâ€“DNA interactions in live mouse tissues. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 10003-10014.	3.3	17
24	Optimization of adeno-associated viral vector-mediated transduction of the corticospinal tract: comparison of four promoters. Gene Therapy, 2021, 28, 56-74.	2.3	62
25	Is Viral Vector Gene Delivery More Effective Using Biomaterials?. Advanced Healthcare Materials, 2021, 10, e2001238.	3.9	34
26	Adeno-Associated Virus Expression of Î±-Synuclein as a Tool to Model Parkinsonâ€™s Disease: Current Understanding and Knowledge Gaps. , 2021, 12, 1120.		11
27	Downregulation of Retinal Connexin 43 in GFAP-Expressing Cells Modifies Vasoreactivity Induced by Perfusion Ocular Pressure Changes. , 2021, 62, 26.		2
28	AAV Targeting of Glial Cell Types in the Central and Peripheral Nervous System and Relevance to Human Gene Therapy. Frontiers in Molecular Neuroscience, 2020, 13, 618020.	1.4	36
29	Future Prospects of Gene Therapy for Friedreichâ€™s Ataxia. International Journal of Molecular Sciences, 2021, 22, 1815.	1.8	25
30	Highly efficient neuronal gene knockout in vivo by CRISPR-Cas9 via neonatal intracerebroventricular injection of AAV in mice. Gene Therapy, 2021, 28, 646-658.	2.3	30
31	Intracranial delivery of AAV9 gene therapy partially prevents retinal degeneration and visual deficits in CLN6-Batten disease mice. Molecular Therapy - Methods and Clinical Development, 2021, 20, 497-507.	1.8	13
32	Optic nerve regeneration screen identifies multiple genes restricting adult neural repair. Cell Reports, 2021, 34, 108777.	2.9	34
33	Delivery Platforms for CRISPR/Cas9 Genome Editing of Glial Cells in the Central Nervous System. Frontiers in Genome Editing, 2021, 3, 644319.	2.7	11
34	Fiberoptic array for multiple channel infrared neural stimulation of the brain. Neurophotonics, 2021, 8, 025005.	1.7	6
35	Adeno-Associated Virus-Mediated Gene Therapy in the Mashlool, Atp1a3^{Mashl/+}, Mouse Model of Alternating Hemiplegia of Childhood. Human Gene Therapy, 2021, 32, 405-419.	1.4	9
36	AAV2/9-mediated silencing of PMP22 prevents the development of pathological features in a rat model of Charcot-Marie-Tooth disease 1â€‰A. Nature Communications, 2021, 12, 2356.	5.8	36

#	Article	IF	Citations
37	Impact of Medium-Sized Extracellular Vesicles on the Transduction Efficiency of Adeno-Associated Viruses in Neuronal and Primary Astrocyte Cell Cultures. International Journal of Molecular Sciences, 2021, 22, 4221.	1.8	3
40	Cell-penetrating peptides enhance the transduction of adeno-associated virus serotype 9 in the central nervous system. Molecular Therapy - Methods and Clinical Development, 2021, 21, 28-41.	1.8	13
41	Genetic Constructs for the Control of Astrocytesâ€™ Activity. Cells, 2021, 10, 1600.	1.8	11
42	Adeno-Associated Viral Vectors as Versatile Tools for Parkinsonâ€™s Research, Both for Disease Modeling Purposes and for Therapeutic Uses. International Journal of Molecular Sciences, 2021, 22, 6389.	1.8	12
43	Gene therapy using AÎ² variants for amyloid reduction. Molecular Therapy, 2021, 29, 2294-2307.	3.7	7
44	3Ã—Tg-AD Mice Overexpressing Phospholipid Transfer Protein Improves Cognition Through Decreasing Amyloid-Î² Production and Tau Hyperphosphorylation. Journal of Alzheimer's Disease, 2021, 82, 1635-1649.	1.2	10
45	Pyk2 in dorsal hippocampus plays a selective role in spatial memory and synaptic plasticity. Scientific Reports, 2021, 11, 16357.	1.6	8
46	Ultrasound-Mediated Blood-Brain Barrier Opening Improves Whole Brain Gene Delivery in Mice. Pharmaceutics, 2021, 13, 1245.	2.0	19
47	Contribution to HIV Prevention and Treatment by Antibody-Mediated Effector Function and Advances in Broadly Neutralizing Antibody Delivery by Vectored Immunoprophylaxis. Frontiers in Immunology, 2021, 12, 734304.	2.2	9
49	Applications of adeno-associated virus vector-mediated gene delivery for neurodegenerative diseases and psychiatric diseases: Progress, advances, and challenges. Mechanisms of Ageing and Development, 2021, 199, 111549.	2.2	9
50	Astrocyte inflammatory signaling mediates Î±-synuclein aggregation and dopaminergic neuronal loss following viral encephalitis. Experimental Neurology, 2021, 346, 113845.	2.0	12
51	MicroRNA-138 Overexpression Alters AÎ²42 Levels and Behavior in Wildtype Mice. Frontiers in Neuroscience, 2020, 14, 591138.	1.4	16
52	Adenoâ€associated virus (AAV)-based gene therapy for glioblastoma. Cancer Cell International, 2021, 21, 76.	1.8	12
53	Interleukin-1 receptor on hippocampal neurons drives social withdrawal and cognitive deficits after chronic social stress. Molecular Psychiatry, 2021, 26, 4770-4782.	4.1	50
54	Use of CRISPR/Cas9-mediated disruption of CNS cell type genes to profile transduction of AAV by neonatal intracerebroventricular delivery in mice. Gene Therapy, 2021, 28, 456-468.	2.3	14
57	Targeting Tanycytes: Balance between Efficiency and Specificity. Neuroendocrinology, 2020, 110, 574-581.	1.2	6
58	Diving into the brain: deep-brain imaging techniques in conscious animals. Journal of Endocrinology, 2020, 246, R33-R50.	1.2	11
59	Drug screening with human SMN2 reporter identifies SMN protein stabilizers to correct SMA pathology. Life Science Alliance, 2019, 2, e201800268.	1.3	13

#	Article	IF	Citations
60	Genetic targeting of astrocytes to combat neurodegenerative disease. Neural Regeneration Research, 2020, 15, 199.	1.6	15
64	Innovative Therapeutic Approaches for Huntingtonâ€™s Disease: From Nucleic Acids to GPCR-Targeting Small Molecules. Frontiers in Cellular Neuroscience, 2021, 15, 785703.	1.8	14
65	Zinc finger E-Box binding homeobox 2 (ZEB2)-induced astrogliosis protected neuron from pyroptosis in cerebral ischemia and reperfusion injury. Bioengineered, 2021, 12, 12917-12930.	1.4	7
66	Progranulin as a therapeutic target in neurodegenerative diseases. Trends in Pharmacological Sciences, 2022, 43, 641-652.	4.0	72
67	In vivo Gene Therapy to the Liver and Nervous System: Promises and Challenges. Frontiers in Medicine, 2021, 8, 774618.	1.2	3
68	Serotype-based evaluation of an optogenetic construct in rat cortical astrocytes. Biochemical and Biophysical Research Communications, 2022, 593, 35-39.	1.0	4
69	FSH blockade improves cognition in mice with Alzheimerâ€™s disease. Nature, 2022, 603, 470-476.	13.7	131
70	Neuronal genetic rescue normalizes brain network dynamics in a lysosomal storage disorder despite persistent storage accumulation. Molecular Therapy, 2022, 30, 2464-2473.	3.7	4
71	Astroglial ER-mitochondria calcium transfer mediates endocannabinoid-dependent synaptic integration. Cell Reports, 2021, 37, 110133.	2.9	27
72	Effective Viral Delivery of Genetic Constructs to Neuronal Culture for Modeling and Gene Therapy of GNAO1 Encephalopathy. Molecular Biology, 2022, 56, 559-571.	0.4	5
73	Adeno-Associated Viruses for Modeling Neurological Diseases in Animals: Achievements and Prospects. Biomedicines, 2022, 10, 1140.	1.4	2
74	Identification of adeno-associated virus variants for gene transfer into human neural cell types by parallel capsid screening. Scientific Reports, 2022, 12, 8356.	1.6	5
75	Viral strategies for targeting spinal neuronal subtypes in adult wild-type rodents. Scientific Reports, 2022, 12, .	1.6	4
76	OPTN attenuates the neurotoxicity of abnormal Tau protein by restoring autophagy. Translational Psychiatry, 2022, 12, .	2.4	6
77	Distinct Cell-specific Roles of NOX2 and MyD88 in Epileptogenesis. Frontiers in Cell and Developmental Biology, 0, 10, .	1.8	8
78	Microglia in antiviral immunity of the brain and spinal cord. Seminars in Immunology, 2022, 60, 101650.	2.7	1
79	Optical Activation of TrkB (E281A) in Excitatory and Inhibitory Neurons of the Mouse Visual Cortex. International Journal of Molecular Sciences, 2022, 23, 10249.	1.8	1
80	AAV vectors: The Rubikâ€™s cube of human gene therapy. Molecular Therapy, 2022, 30, 3515-3541.	3.7	87

#	Article	IF	Citations
81	Recent developments in nucleic acid-based therapies for Parkinsonâ€™s disease: Current status, clinical potential, and future strategies. Frontiers in Pharmacology, 0, 13, .	1.6	3
82	Mass spectrometry in gene therapy: Challenges and opportunities for AAV analysis. Drug Discovery Today, 2023, 28, 103442.	3.2	2
83	Histone deacetylase 1 regulates haloperidol-induced motor side effects in aged mice. Behavioural Brain Research, 2023, 447, 114420.	1.2	0
84	Base editing rescue of spinal muscular atrophy in cells and in mice. Science, 2023, 380, .	6.0	46