Excellence in Separations

OptiPrep™ Reference List RV02-2

GROUP II VIRUSES - rAAV

- **IMPORTANT NOTE: RV02-2 LISTS rAAV PAPERS PUBLISHED AFTER SEPT. 2018. THE COMPANION LIST (RV02-1) LISTS rAAV PAPERS PUBLISHED BEFORE SEPT. 2018.**
- **RV02-1 also lists publications on Group II viruses other than rAAV.**
- **References are divided alphabetically into "Site of delivery" and/or "Research topic" sections. References in each section are listed alphabetically according to first author; multiple references by the same first author are presented chronologically.**
- To aid selection, key words are highlighted in blue.
- **For detailed methodologies of Group II virus purifications see OptiPrep™ Application Sheets V14-V16. V06 is a methodological review of OptiPrep™ technology.**

AAV properties

AAV2 capsid structure

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AAVr3.45

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AAV biology

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AAV libraries

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AAV receptors

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Adipose tissue (incl. brown fat tissue)

Huang, W., Queen, N.J. and Cao, L. (2019) *rAAV-mediated gene delivery to adipose tissue* In Adeno-Associated Virus Vectors: Design and Delivery, Methods in Mol. Biol., **vol. 1950** (ed. Castle, M.J.), Springer Science+Business Media LLC New York, pp 389-405

Mouchiroud, M., Camiré, E., Aldow, M., Caron, A., Jubinville, E., Turcotte, L., Kaci, I., Beaulieu, M-J., Roy, C. et al (2019) *The Hepatokine TSK does not affect brown fat thermogenic capacity, body weight gain, and glucose homeostasis* Mol. Metab., **30**, 184-191

Age-related diseases

Davidsohn, N., Pezzone, M., Vernet, A., Graveline, A., Oliver, D., Slomovic, S., Punthambaker, S., Sun, X., Liao, R., Bonventre, J.V., and Church, G.M. (2019) *A single combination gene therapy treats multiple age-related diseases* Proc. Nat. Acad. Sci. USA, **116**, 23505–23511

Aldehyde dehydrogenase

Matsumura, Y., Stiles, K.M., Reid, J., Frenk, E.Z., Cronin, S., Pagovich, O.E. and Crystal, R.G. (2019) *Gene therapy correction of aldehyde dehydrogenase 2 deficiency* Mol. Ther: Meth. Clin. Devel., **15** 72-82

Amyloidosis

Colon-Perez, L.M., Ibanez, K.R., Suarez, M., Torroella, K., Acuna, K., Ofori, E., Levites, Y., Vaillancourt, D.E., Golde, T.E. et al (2019) *Neurite orientation dispersion and density imaging reveals white matter and hippocampal microstructure changes produced by Interleukin-6 in the TgCRND8 mouse model of amyloidosis* NeuroImage, **202**: 116138

Anaesthesia

Zhou, B., Chen, L., Liao, P., Huang, L., Chen, Z., Liao, D., Yang, L., Wang, J. et al (2019) *Astroglial dysfunctions drive aberrant synaptogenesis and social behavioral deficits in mice with neonatal exposure to lengthy general anesthesia* PLoS Biol., **17**: e3000086

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Atherosclerosis

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Al-Moyed, H., Cepeda, A.P., Jung, SY., Moser, T., Kügler, S. and Reisinger, E. (2019) *A dual-AAV approach restores fast exocytosis and partially rescues auditory function in deaf otoferlin knock-out mice* EMBO Mol. Med., **11**: e9396

Autoimmune disorders

Vasquez, M., Consuegra-Fernández, M., Aranda, F., Jimenez, A., Tenesaca, S., Fernandez-Sendin, M., Gomar, C., Ardaiz, N., Di Trani, C.A. (2019) *Treatment of experimental autoimmune encephalomyelitis by sustained delivery of low-dose IFN-α* J. mmunol., **203**, 696–704

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Wu, H., Chen, H., Zheng, Z., Li, J., Ding, J., Huang, Z., Jia, C., Shen, Z., Bao, G., Wu, L., Al Mamun, A. et al (2019) *Trehalose promotes the survival of random-pattern skin flaps by TFEB mediated autophagy enhancement* Cell Death Dis., **10**: 483

Baculovirus expression vector

Sandro, Q., Relizani, K. and Benchaouir, R. (2019) *AAV production using baculovirus expression vector system* In Viral Vectors for Gene Therapy: Methods and Protocols, Methods in Mol. Biol., **1937** (ed. Manfredsson F.P. and Benskey, M.J.), Springer Science+Business Media LLC New York, pp 91-99

Basolateral amygdalae

Huang, T-N., Hsu, T-T., Lin, M-H., Chuang, H-C., Hu, H-T., Sun, C-P., Tao, M-H., Lin, J.Y. and Hsueh, Y-P. (2019) *Interhemispheric connectivity potentiates the basolateral amygdalae and regulates social interaction and memory* Cell Reports 29, 34–48

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Fakhiri, J., Schneider, M.A., Puschhof, J., Stanifer, M., Schildgen, V., Holderbach, S., Voss, Y., El Andari, J., Schildgen, O. et al (2019) *Novel chimeric gene therapy vectors based on adeno-associated virus and four different mammalian bocaviruses* Mol. Ther. Meth. Clin. Devel., **12**, 202-222

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Capsid structure/capsid variants/libraries

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Challis, R.C., Kumar, S.R., Chan, K.Y., Challis, C., Beadle, K., Jang, M.J., Kim, H.M., Rajendran, P.S., Tompkins, J.D et al (2019) *Systemic AAV vectors for widespread and targeted gene delivery in rodents* Nat. Protoc., **14**, 379–414

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Cardiac disorders

Cardiac gene delivery

Adamiak, M., Liang, Y., Mathiyalagan, P., Agarwal, M., Jha, D., Kohlbrenner, E., Chepurko, E., Jeong, D. et al (2018) *Robust cardiac gene delivery and evasion of neutralizing antibodies by extracellular vesicle-associated AAV vectors* Circulation, **138**, Suppl.1, abstr. 16378

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Cardiomyopathy

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Myocardial infarction

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Transcription factors

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Cell-specific gene transfer

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Cellular communication network factor 1 (CCN1)

Lee, S., Ahad, A., Luu, M., Moon, S., Caesar, JA., Cardoso, W.V., Grant, M.B. and Chaqoura, B. (2019) CCN1–Yes-associated protein feedback loop regulates physiological and pathological angiogenesis Mol. Cell. Biol., **39**: e00107-19

Cholestasis

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Circular RNAs

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Clinical application (AAV vector choice)

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Cre recombinase gene

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Cytosine/adenine base editing

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Dendritic cell targeting

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Diabetic disorders

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DNA shuffling

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Enteric nervous system

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Epidermal growth factor

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Food-seeking behaviour

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serumwerk bernburg
Serumwerk Bernburg AG • Hallesche Landstraße 105 b • 06406 Bernburg • Germany
phone: +49 3471 860 429 • diagnostic.serumwerk.com • diagnostic@serumwwerk.com • serumwerk.de