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(54) Title: METHODS FOR ANALYZING AAV CAPSID PROTEINS

(57) Abstract: Provided are methods to characterize the VP1, VP2 and VPS capsid proteins in an adeno-associated virus (AAV) particle using liquid chromatography mass spectrometry, and/or ultraviolet (UV)-visible spectroscopy. The methods generally include the steps of (a) subjecting an AAV particle to liquid chromatography to denature and then separate the VP1, VP2 and VPS capsid proteins, and (b) subjecting the separated VP1, VP2 and VPS capsid proteins produced in step (a) to UV and mass spectrometry to determine the ratio and masses of the VP1, VP2 and VPS capsid proteins in the AAV particle. In another aspect, the disclosure provides an AAV composition comprising a post-translation modification. The disclosure also provides methods for characterizing the purity of AAV compositions using liquid chromatography mass spectrometry.



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