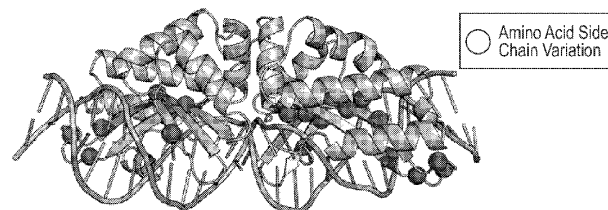




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(54) **Title:** TREATMENT OF HSV-2 USING A MEGANUCLEASE



OnuHSV2a Library Design Strategy

```
TTTCCACTTATTCAACCTTTTA wildtype I-OnuI (SEQ ID NO: 41)
TaTCCtTTtTTCTAgTgTTt OnuHSV2a target (SEQ ID NO: 13)
TTTCCACTTtTTCTACCTTTTA OnuHSV2a Lib01 (SEQ ID NO: 15)
TTTCCtTTtTTCTCAACCTTTTA OnuHSV2a Lib02 (SEQ ID NO: 16)
TTTCCtTTtTTCTACCTTTTA OnuHSV2a Lib03 (SEQ ID NO: 17)
TaTCCtTTtTTCTACCTTTTA OnuHSV2a Lib04 (SEQ ID NO: 18)
TaTCCtTTtTTCTAgCTTTTA OnuHSV2a Lib05 (SEQ ID NO: 19)
TTTCCACTTtTTCTAAGgTTTTA OnuHSV2a Lib06 (SEQ ID NO: 20)
TaTCCtTTtTTCTAggTTTTA OnuHSV2a Lib07 (SEQ ID NO: 21)
TaTCCtTTtTTCTAggTgTTA OnuHSV2a Lib08 (SEQ ID NO: 22)
TaTCCtTTtTTCTAggTgTTt OnuHSV2a Lib09 (SEQ ID NO: 13)
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FIG. 1

(57) **Abstract:** Described herein are compositions and methods for reducing or eliminating latent herpes simplex virus type 2 (HSV-2) from an HSV-2-infected cell, or for reducing or eliminating latent HSV-2 reactivation in an HSV-2-infected cell, leading to a viable curative approach for latent HSV-2 infection. The composition comprises a plurality of viral vectors, wherein the viral vectors comprise a sequence encoding an HSV-2-specific meganuclease. The method comprises delivering to an HSV-2-infected cell a plurality of one or more viral vectors, wherein each of the one or more viral vectors includes a sequence encoding an HSV-2-specific meganuclease.

[Continued on next page]

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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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