

HSV-GFP-NIS

Product Description

Product Name: HSV-GFP-NIS (Standard Titer, 0.25 mL)
 Catalog Number: OV3003
 Lot Number: OV-IM35

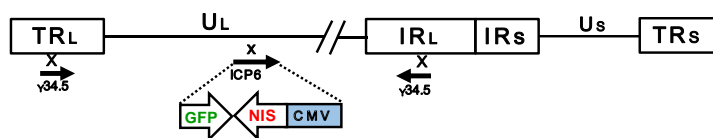
Shipping conditions: Dry ice
 Storage conditions: Store at $\leq -70^{\circ}\text{C}$ upon receipt, avoid
 subjecting to multiple freeze-thaw cycles

Species: Herpes simplex virus-1 (HSV-1)
 Virus strain: HSV-1 strain 17+
 Transgene: Green fluorescent protein (GFP)
 Human sodium iodide symporter (hNIS)

Production Cell Line: Vero
 Storage Media: Serum-free media
 Propagation: Inoculate producer cells (e.g. Vero) at an MOI of 0.01 for 2-3 hours. Harvest culture supernatant and cells when 80-90% of the cell monolayer is showing cytopathic effects (CPE). Freeze-thaw 3 cycles and clarify the supernatant by low-speed centrifugation. Centrifuge the supernatant at 14,000 x g for 1h at 4°C. Resuspend the viral pellet in DPBS.

HSV-GFP-NIS is a recombinant of the strain 17+ of Herpes simplex virus-1. HSV-GFP-NIS contains a deletion of both copies of the ICP34.5. The human cytomegalovirus (CMV) promoter followed by the hNIS cDNA is inserted in the ICP6 reading frame (see diagram below). The purchased virus is ready for use in cell killing assays or may be amplified to generate additional virus stocks.

Genome:



References:

- Campadelli-Fiume, et al. *Rev. Med. Virol.* (2011), 21(4):213-26.
- Li, et al. *Cancer Gene Ther.* (2013), 20(8): 478–485.
- Maneta, et al., *Nat. Med.* (1995), 1(9):938-43.
- Chou, et al., *Science* (1990), 250, 1262-1266.
- Kramm, et al., *Human Gen. Therapy* (1997), 8:2057-2068
- Bolovan, et al., *J Virol.* (1994), 68(1): 48–55.

Safety Precaution:

All culture work with HSV should be performed by trained personnel and performed under BSL2 containment following NIH guidelines.

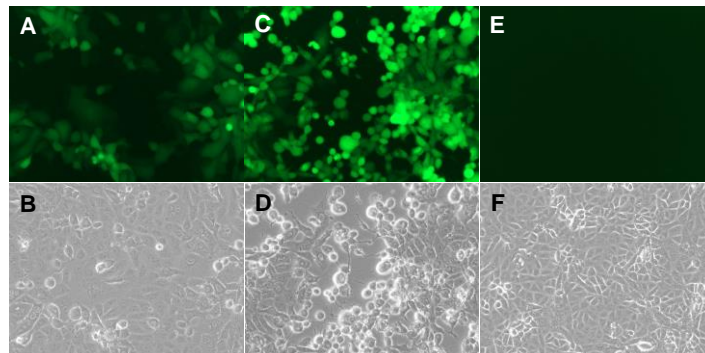


Certificate of Analysis

Testing performed by Imanis Life Sciences

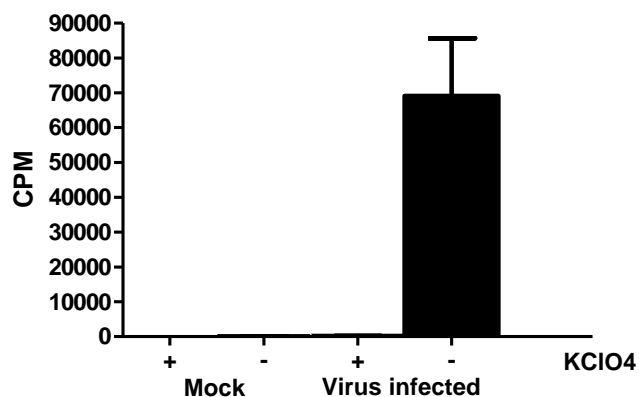
Test description	Result
Titer (on Vero cells)	1.15 x10 ⁷ TCID ₅₀ units/mL
Sterility	Pass QC
Cytopathic Effect	Pass QC
Endotoxin Test	Pass QC
Fluorescence expression	Pass QC
NIS Expression	Pass QC

Infectivity:



Vero cells were infected with HSV-GFP-NIS (MOI 0.1) (A-D) or mock-infected (E&F). Photos taken at 24 h.p.i. (A&B) or 48 h.p.i (C-F).

NIS Expression:



The functionality of the hNIS gene was assessed using an uptake assay; uptake of ¹²⁵I by HSV-GFP-NIS-infected Vero cells (MOI=0.1) was measured 24 h.p.i. in the presence (+) or absence (-) of KClO₄, an inhibitor of NIS-mediated ¹²⁵I uptake.

Quality Control by: MT
 Quality Assurance by: RLV
 Effective Date: 05-Mar-2019

Legal Disclaimers

This warranty limits our liability to replacement of this product. No other warranties of any kind, express or implied, including, without limitation, implied warranties of merchantability or fitness for a particular purpose, are provided by Imanis Life Sciences. Imanis Life Sciences shall have no liability for any direct, indirect, consequential, or incidental damages arising out of the use, the results of use, or the inability to use this product.

In no event shall Imanis Life Sciences be liable for any use by Recipient of the Material or for any loss, claim, damage, or liability, of any kind or nature, that may arise from or in connection with the recipient's use, handling, storage, or disposal of the Material, except as such claims, demands, costs, or judgments may arise from Imanis Life Sciences' gross negligence or willful misconduct. Recipient assumes responsibility for, and agrees to indemnify and hold harmless Imanis Life Sciences and Imanis' trustees, officers, agents, and employees from any liability, loss, or damage they may suffer as a result of any claims, demands, costs, or judgments against them arising out of the use, handling, storage, or disposal of the Material by Recipient, except as such claims, demands, costs, or judgments may arise from Imanis Life Sciences' gross negligence or willful misconduct.

For research use only. This certificate is a declaration of analysis at the time of manufacture

PURCHASER NOTIFICATION

LIMITED LICENSE NOTICE – RESEARCH USE ONLY

BY SUBMITTING A SALES ORDER AND OPENING THE PACKAGING OF ORIGINAL MATERIAL, RECIPIENT AGREES TO BE BOUND TO THE TERMS OF THE MATERIAL TRANSFER AGREEMENT ENCLOSED WITH THE PRODUCT. IF RECIPIENT DOES NOT AGREE TO THESE TERMS, DO NOT OPEN THE PACKAGING ON THE ORIGINAL MATERIAL.

1. Imanis Life Sciences has exclusive licenses to sell recombinant measles and Vesicular stomatitis viruses for research use. The sale, license, lease, export, transfer or other distribution of the Material to entity not party to this MTA for financial gain or other commercial purposes and/or the use of the Material to provide a service to a person or entity not party to this MTA for financial gain; or to produce or manufacture for general sale or products for use in the manufacture of products ultimately intended for general sale is STRICTLY PROHIBITED.

2. Limited Use of Material. Recipient may use the Original Material and Progeny only under the direction of Recipient's Scientist for the Research, subject to all of the restrictions set forth herein. No person authorized to use the Material shall be allowed to take or send the Original Material or any Progeny to any location other than the Recipient Scientist's Address, even within Recipient's organization, without Imanis Life Sciences' written consent.

3. Limited Rights Granted. All Material is and remains the property of Imanis. Legal title to the Material shall be unaffected by this Agreement or the transfer made hereunder, and nothing in the Agreement grants Recipient any rights under any patents nor any rights to use the Material or any Modifications or process(es) derived from or with the Material for profit-making or Commercial Purposes. Nothing in this Agreement shall alter any rights the U.S. Government may have with respect to the Material.

4. Not for human or veterinary use. The Material is for research use only and NOT TO BE USED IN HUMANS OR VETERINARY ANIMALS (including for diagnostic purposes). All research involving the Material (including but not limited to research involving the use of animals and recombinant DNA) and disposal of the Material shall be conducted in accordance with all federal, state, local, import/export and other laws, regulations, and ordinances governing such research including applicable NIH guidelines. Recipient will be solely responsible to obtain any necessary governmental permits or approvals to receive and handle the Material.

5. Disclaimers. Any Material delivered pursuant to this Agreement is understood to be experimental in nature, and IMANIS LIFE SCIENCES MAKES NO REPRESENTATIONS AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR THAT THE USE OF THE MATERIAL WILL NOT INFRINGE ANY PATENT, COPYRIGHT, TRADEMARK, OR OTHER RIGHTS.