



## Product Data Sheet

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<b>Product Name:</b>	Chimeric Rabies Virus Glycoprotein Fragment (RVG-9R)	
<b>Catalog Number:</b>	AS-62565 (1 mg)	<b>Lot Number:</b> See label on vial
<b>Sequence:</b>	H-Tyr-Thr-Ile-Trp-Met-Pro-Glu-Asn-Pro-Arg-Pro-Gly-Thr-Pro-Cys-Asp-Ile-Phe-Thr-Asn-Ser-Arg-Gly-Lys-Arg-Ala-Ser-Asn-Gly-Gly-Gly-Gly-Arg-Arg-Arg-Arg-Arg-Arg-Arg-Arg-OH (3-letter code) YTIWMPENPRPGTPCDIFTNSRGKRASNGGGGRRRRRRRRR (1-letter code)	
<b>Molecular Weight:</b>	4843.5	
<b>Peptide Purity:</b>	>95%	
<b>Appearance:</b>	Lyophilized white powder	

**Peptide Reconstitution:** Chimeric Rabies Virus peptide is freely soluble in water.

**Storage:** Chimeric Rabies Virus peptide is shipped at ambient temperature. Upon receipt, store lyophilized peptide at  $-20^{\circ}\text{C}$  or lower. Reconstituted peptide can be aliquoted and stored at  $-20^{\circ}\text{C}$  or lower.

**Description:** This chimeric peptide is a fragment derived from rabies virus glycoprotein (RVG). Because neurotropic viruses cross the blood-brain barrier to infect brain cells, the same strategy may be used to enter the central nervous system and deliver siRNA to the brain. To enable siRNA binding, this chimeric peptide was synthesized by adding nonamer arginine residues at the carboxy terminus of RVG. This RVG-9R peptide was able to bind and transduce siRNA to neuronal cells in vitro, resulting in efficient gene silencing. After intravenous injection into mice, RVG-9R delivered siRNA to the neuronal cells, resulting in specific gene silencing within the brain. RVG-9R provides a safe and noninvasive approach for the delivery of siRNA and potentially other therapeutic molecules across the blood-brain barrier. Ref: Kumar, P. et al. *Nature* **448**, 39 (2007).

### Related Products:

Name	Cat #	Size
Rabies Virus Glycoprotein (RVG)	AS-62566	1 mg
YTIWMPENPRPGTPCDIFTNSRGKRASNG		

*For Research Use Only*