

## Synthetic Human Enfuvirtide T-20

<b>Catalog No.</b>	CRE109A	<b>Quantity:</b>	90 mg
	CRE109B		900 mg
	CRE109C		1.8 g

**Alternate Names:** Human Immunodeficiency fusion inhibitor

**Description:** Enfuvirtide also called human immunodeficiency fusion inhibitor blocks HIV's ability to infect healthy CD4 cells. It can reduce the amount of HIV in the blood and increase the number of CD4 cells. Enfuvirtide operates by disrupting the HIV-1 molecular machinery at the final phase of fusion with the target cell, preventing uninfected cells from becoming infected. Enfuvirtide mimics components of the HIV-1 fusion apparatus and displace them, preventing normal fusion. HIV attaches to the host CD4+ cell receptor using the viral protein GP120; upon binding, GP120 deforms allowing the viral protein GP41 to insert itself into the host cell's plasma membrane. Entry inhibitors bind to GP41 preventing the formation of an entry pore for the capsid of the virus, keeping it out of the cell. It has a molecular formula of  $C_{204}H_{301}N_{51}O_{64}$ .

**Molecular Weight:** 4.492 kDa

**Formulation:** Lyophilized from a sterile filtered solution without additives

**Purity:** > 99% as determined by SDS-PAGE, RP-HPLC, and FPLC anion-exchange analyses

**Endotoxin Level:** < 0.1 ng/μg of Enfuvirtide

**Dimers and Aggregates:** < 1% as determined by SDS-PAGE analysis

**Amino Acid Sequence:** CH<sub>3</sub>CO-Tyr-Thr-Ser-Leu-Ile-His-Ser-Leu-Ile-Glu-Glu-Ser-Gln-Asn-Gln-Gln-Glu-Lys-Asn-Glu-Gln-Glu-Leu-Leu-Glu-Leu-Asp-Lys-Trp-Ala-Ser-Leu-Trp-Asn-Trp-Phe-NH<sub>2</sub>

**Reconstitution:** **Centrifuge vial prior to opening.** First add sterile distilled water to the vial to fully solubilize the protein to a concentration not less than 100 μg/ml. After complete solubilization of the protein, it can be further diluted to other aqueous solutions.

**Storage & Stability:** Store lyophilized protein at -20°C to -80°C. Reconstituted protein is stable for 1 week at 2-4°C. For long term storage, aliquot and store at -20°C to -80°C with a carrier protein (0.1% HSA or BSA) as a stabilizer. **Please note that the addition of any carrier protein into this product may produce unwanted endotoxin. This depends upon the particular application employed. Avoid repeated freeze-thaw cycles.**

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