

Product Data Sheet

Cat # RP-1548

Enfuvirtide T-20

Size: 50 mg

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.

Enfuvirtide has an 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>,

Molecular formula: C<sub>204</sub>H<sub>301</sub>N<sub>51</sub>O<sub>64</sub>

Molecular weight: 4492 dalton.

**Form and Storage:**

Supplied as lyophilized (freeze-dried) powder. It is recommended to reconstitute the lyophilized Enfuvirtide in water at not less than 100µg/ml, which can then be further diluted to other aqueous solutions. If supplied in powder then reconstitute it in 100 ul water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage

Lyophilized Enfuvirtide although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Enfuvirtide should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Purity: >99% by HPLC;** Less than 1% as determined by silver-stained SDS-PAGE gel analysis

**Suggested Usage:** This item is for LABORATORY RESEARCH USE ONLY.

**References:** Lalezari JP (2003) AIDS 17, 691-698; Greenberg ML (2004) J. Antimicrobial chemotherapy 54, 333-340

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