

## Product Information

### **b-SECRETASE INHIBITOR**

Product Number **S 4562**

Storage Temperature  $-20^{\circ}\text{C}$

(KTEEISEVN [Statine] VAEF; Lys-Thr-Glu-Glu-Ile-Ser-Glu-Val-Asn-[Statine]-Val-Ala-Glu-Phe-OH))

#### **Product Description**

Appearance: White Powder

Molecular Formula:  $\text{C}_{73}\text{H}_{118}\text{N}_{16}\text{O}_{27}$

Formula Weight: 1651.8

Purity: >97 % by HPLC.

A  $\beta$ -secretase inhibitor.<sup>1</sup>

A key event in Alzheimer's disease is the sequential proteolytic cleavage of the amyloid protein from the amyloid protein precursor (APP) by  $\beta$ - and  $\gamma$ -secretase.  $\beta$ -secretase (BACE), a transmembrane aspartyl protease cleaves the APP to yield the N terminus of the amyloid  $\beta$  peptide. Whereas,  $\gamma$ -secretase cleaves the C terminus. Accumulation of the amyloid  $\beta$  peptides results in neuritic plaques in brain parenchyma and may be a root cause of Alzheimer's disease.

#### **Preparation Instructions**

Soluble in DMSO (high purity, >99.9 %)

#### **Storage/Stability**

Store tightly sealed and desiccated at  $-20^{\circ}\text{C}$ . Allow powder to reach room temperature before opening vial. May be stored desiccated in solid form at room temperature for one year.

#### **Reference**

1. Anderson, S.S., et al., Purification and cloning of amyloid precursor protein beta-secretase from human brain. *Nature*, **402**, 537-540 (1999).

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