# **PRODUCT** INFORMATION



## 5-FAM-Amyloid-β (1-28) Peptide (human) (trifluoroacetate salt)

Item No. 27108

| MF:          | С <sub>166</sub> Н <sub>219</sub> N <sub>41</sub> O <sub>52</sub> • ХСF <sub>3</sub> СООН |  |
|--------------|---|--|
| FW:          | 3,620.8   | 5-FAM—Asp—Ala—Glu—Phe—Arg—His—Asp—Ser—Gly—Tyr— |
| Purity:      | ≥95%  | Glu—Val—His—His—Gln—Lys—Leu—Val—Phe—Phe—       |
| Ex./Em. Max: | 492/518 nm  | Ala—Glu—Asp—Val—Gly—Ser—Asn—Lys—OH             |
| Supplied as: | A solid   | Ala ala Asp vai aly oor Ash Eys off            |
| Storage:     | -20°C   | • XCF <sub>3</sub> COOH                        |
| Stability:   | ≥4 years  |  |
|              |   |  |

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

#### Laboratory Procedures

5-FAM-Amyloid- $\beta$  (1-28) peptide (human) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the 5-FAM-amyloid- $\beta$  (1-28) peptide (human) (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. 5-FAM-Amyloid- $\beta$  (1-28) peptide (human) (trifluoroacetate salt) is soluble in the organic solvent formic acid at a concentration of approximately 1 mg/ml.

#### Description

5-FAM-Amyloid- $\beta$  (1-28) peptide is a fluorescently labeled peptide. Amyloid- $\beta$  (1-28) (A $\beta$ 28) is a synthetic peptide that lacks 14 C-terminal amino acids and is more soluble than  $A\beta 42.^1 A\beta 28$  forms fibrils and plaques in vitro that are similar to those formed by A $\beta$ 42 and induces learning deficits in a passive avoidance task in rats.<sup>2-4</sup> 5-FAM-Amyloid- $\beta$  (1-28) is a labeled form of A $\beta$ 28 containing 5-carboxyfluorescein (5-FAM; Item No. 19581), which displays excitation/emission maxima of 492/518 nm, respectively.

#### References

- 1. Syme, C.D., Nadal, R.C., Rigby, S.E., et al. Copper binding to the amyloid-beta (Aβ) peptide associated with Alzheimer's disease. Folding, coordination geometry, pH dependence, stoichiometry, and affinity of A $\beta$ (1-28): Insights from a range of complementary spectroscopic techniques. J. Biol. Chem. 279(18), 18169-18177 (2004).
- 2. Kirschner, D.A., Inouye, H., Duffy, L.K., et al. Synthetic peptide homologous to β protein from Alzheimer disease forms amyloid-like fibrils in vitro. Proc. Natl. Acad. Sci. U.S.A. 84(19), 6953-6957 (1987).
- 3. Burdick, D., Soreghan, B., Kwon, M., et al. Assembly and aggregation properties of synthetic Alzheimer's A4/β amyloid peptide analogs. J. Biol. Chem. 267(1), 546-554 (1992).
- 4. Alvarez, X.A., Miguel-Hidalgo, J.J., Fernández-Novoa, L., et al. Intrahippocampal injections of the beta-amyloid 1-28 fragment induces behavioral deficits in rats. Methods Find. Exp. Clin. Pharmacol. 19(7), 471-479 (1997).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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