PRODUCT INFORMATION

TAMRA-Amyloid-β (1-28) Peptide (human) (trifluoroacetate salt)

Item No. 27110

Synonyms:	TAMRA-Aβ (1-28), TAMRA-Aβ28
MF:	$C_{170}H_{229}N_{43}O_{50} \bullet XCF_3COOH$
FW:	3,674.9
Purity:	≥95%
Ex./Em. Max:	543/572 nm
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years

TAMRA—Asp—Ala—Glu—Phe—Arg—His—Asp—Ser—Gly—Tyr—
Glu—Val—His—His—Gln—Lys—Leu—Val—Phe—Phe—
Ala—Glu—Asp—Val—Gly—Ser—Asn—Lys—OH
• XCF_3COOH

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

Laboratory Procedures

TAMRA-Amyloid-β (1-28) (TAMRA-Aβ28) peptide (human) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the TAMRA-Aβ28 peptide (human) (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. The solubility of TAMRA-Aβ28 peptide (human) (trifluoroacetate salt) in formic acid is approximately 1 mg/ml.

Description

TAMRA-Aβ28 peptide is a fluorescently labeled peptide. Amyloid-β (1-28) (Aβ28) is a synthetic peptide that lacks 14 C-terminal amino acids and is more soluble than Aβ42.[1] Aβ28 forms fibrils and plaques *in vitro* that are similar to those formed by Aβ42 and induces learning deficits in a passive avoidance task in rats.[2-4] TAMRA-Aβ28 peptide is a labeled form of Aβ28 containing carboxytetramethyl rhodamine (TAMRA), which displays excitation/emission maxima of 543/572 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 Aβ(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.

SAFETY 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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