

PRODUCT INFORMATION



TC4

Item No. 45086

Peptide Sequence: YXQGTFTSDYSILLDR[K-βAla-OEG-γGlu-C18DA]AQA[Aib,X]AFIEYLLEGGPSLRHYVNWLTRQRY-NH₂

MF: C₂₇₇H₄₂₃N₆₉O₇₈ • XCF₃COOH

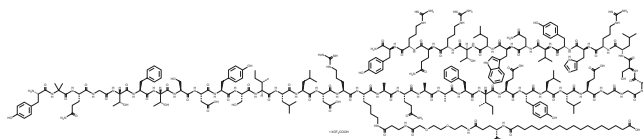
FW: 5,967.8

Purity: ≥95%

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

TC4 is supplied as a crystalline solid. A stock solution may be made by dissolving the TC4 in the solvent of choice, which should be purged with an inert gas. TC4 is slightly soluble (0.1-1 mg/ml) in methanol.

Description

TC4 is a synthetic peptide and tetra-agonist of the glucagon-like peptide 1 receptor (GLP-1R), glucagon receptor (GCGR), gastric insulinotropic polypeptide receptor (GIPR), also known as gastric inhibitory polypeptide, and the neuropeptide Y (NPY) receptor Y₂.¹ TC4 is a cAMP-biased GLP-1R agonist that selectivity induces cAMP accumulation over β-arrestin-2 recruitment. It induces cAMP accumulation in HEK293C34L cells expressing human GLP-1R (EC₅₀ = 31 pM) and in HEK293T cells expressing human GCGR or GIPR (EC₅₀s = 81 and 0.98 pM, respectively). It induces intracellular Ca²⁺ release in HEK293T cells expressing the human Y₂ receptor (EC₅₀ = 1,100 pM).

Reference

1. Dinsmore, T.C., Cortigiano, J.E., Xiang, S., *et al.* Molecular design of unimolecular tetra-receptor agonists. *J. Am. Chem. Soc.* **147**(24), 20819-20832 (2025).

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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