

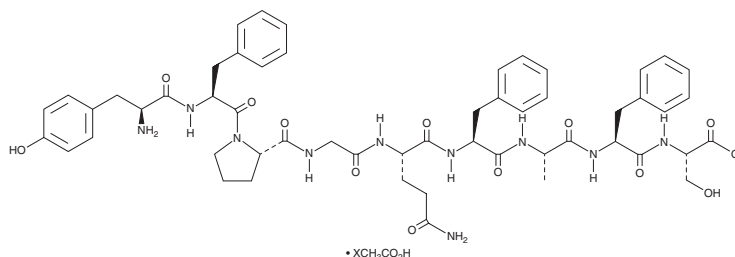
PRODUCT INFORMATION



Chemerin-9 (human) (acetate)

Item No. 36760

Formal Name: L-tyrosyl-L-phenylalanyl-L-prolylglycyl-L-glutaminy-L-phenylalanyl-L-alanyl-L-phenylalanyl-L-serine, acetate
Synonyms: Chemerin (149-157), YFPGQFAFS
MF: C₅₄H₆₆N₁₀O₁₃ • XC₂H₄O₂
FW: 1063.2
Purity: ≥95%
Supplied as: A 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

Chemerin-9 (human) (acetate) is supplied as a solid. A stock solution may be made by dissolving the chemerin-9 (human) (acetate) in the solvent of choice, which should be purged with an inert gas. Chemerin-9 (human) (acetate) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of chemerin-9 (human) (acetate) in these solvents is approximately 12 and 16 mg/ml, respectively. Chemerin-9 (human) (acetate) is also slightly soluble in ethanol.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of chemerin-9 (human) (acetate) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of chemerin-9 (human) (acetate) in PBS (pH 7.2) is approximately 0.3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Chemerin-9 is a peptide agonist of chemokine-like receptor 1 (CMKLR1) and CMKLR2, also known as chemerin receptor 1 (chemerin₁) and chemerin₂, respectively.¹ It is composed of nine C-terminal amino acids of the endogenous human protein chemerin, a chemotactic protein and adipokine involved in the early immune response and energy homeostasis.² Chemerin-9 binds to CMKLR1 and CMKLR2 (IC₅₀s = 1.9 and 2.3 nM, respectively, in a radioligand binding assay) and induces calcium mobilization in HEK293T cells expressing either CMKLR1 or CMKLR2 and the G protein G_{α15} when used at a concentration of 1 μM.³

References

1. Wittamer, V., Grégoire, F., Robberecht, P., *et al.* The C-terminal nonapeptide of mature chemerin activates the chemerin receptor with low nanomolar potency. *J. Biol. Chem.* **279(11)**, 9956-9962 (2004).
2. Fischer, T.F. and Beck-Sickinger, A.G. Chemerin - exploring a versatile adipokine. *Biol. Chem.* **403(7)**, 625-642 (2022).
3. Barnea, G., Strapps, W., Herrada, G., *et al.* The genetic design of signaling cascades to record receptor activation. *Proc. Natl. Acad. Sci. USA* **105(1)**, 64-69 (2008).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/07/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM