
Product Data Sheet

Product Name: β -Casomorphin, bovine TFA

Cat. No.: GC60391

Chemical Properties

Cas. No.

Formula $C_{43}H_{56}F_3N_7O_{11}$ M.Wt 903.94

Solubility Storage

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure β -Casomorphin, bovine TFA

Background

β -Casomorphin, bovine TFA (β -Casomorphin-7 (bovine) TFA) is a opioid peptide with an IC50 of 14 μ M in an Opioid receptors binding assay[1].

β -Casomorphin, bovine TFA (0.1 μ M; 30 minutes-24 hours) stimulates the secretion of mucin in DHE Cells after 8 h of treatment[2]. β -Casomorphin, bovine TFA (0.1 μ M; 24 hours) induces an increase in rMuc2 and rMuc3 mRNA levels[2]. β -Casomorphin, bovine TFA does not modify the expression of rMuc1, rMuc4, and rMuc5AC[2]. β -Casomorphin, bovine TFA (0.1 μ M; 24 hours) stimulates MUC5AC expression and mucin Secretion in HT29-MTX Cells (human)[2].

β -Casomorphin, bovine TFA (7.5×10^{-6} mol/day/kg ; i.g.; for 30 days) increases plasma insulin and decreased plasma glucagon of diabetic rats[3]. β -Casomorphin, bovine TFA (7.5×10^{-6} mol/day/kg ; i.g.; for 30 days) alters the changes of SOD, GPx, T-AOC, MDA and H2O2 in the kidney of diabetic rats[3]. β -Casomorphin, bovine TFA (7.5×10^{-6} mol/day/kg ; i.g.; for 30 days) reduces MDA (significantly) and H2O2 (non-significantly) level in the kidney compared to the diabetic rats[3]. β -Casomorphin, bovine TFA (7.5×10^{-6} mol/day/kg ; i.g.; for 30 days) alleviates high glucose-induced decrease in SOD and GPx activity, increase in MDA contents in the NRK-52E cells[3]. Animal Model:

Caution: Product has not been fully validated for medical applications. For research use only.

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Male Sprague-Dawley (SD) rats (200 g±10 g)[3]

[1]. Brantl V, et al. Opioid activities of beta-casomorphins. Life Sci. 1981 Apr 27;28(17):1903-9. [2]. Zoghbi S, et al. β -casomorphin-7-7 regulates the secretion and expression of gastrointestinal mucins through a μ -opioid pathway. Am J Physiol Gastrointest Liver Physiol. 2006 Jun;290(6):G1105-13. [3]. Zhang W, et al. The protective effects of beta-casomorphin-7 against glucose -induced renal oxidative stress in vivo and vitro. PLoS One. 2013 May 3;8(5):e63472.

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