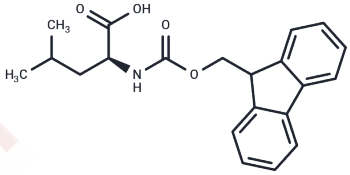
Data Sheet (Cat.No.T8638)

TargetMol

NPC 15199

Chemical Properties



CAS No. : 35661-60-0

Formula: C21H23NO4

Molecular Weight: 353.41

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	NPC 15199 (FMOC-L-Leucine) is an anti-inflammatory agent.
Targets(IC50)	Others,PPAR
In vitro	NPC-15199 [(N-(9-fluorenylmethoxycarbonyl)L-leucine)], a novel anti-inflammatory agent, increases intracellular Ca2+ concentration ([Ca2+]i) in human bladder female transitional cancer (BFTC) cells.?Using fura-2 as a Ca2+ probe, NPC-15199 (0.1-2 mM) was found to increase [Ca2+]i concentration-dependently.?The response saturated at 2-5 mM NPC-15199.?The [Ca2+]i increase comprised an initial rise, a slow decay, and a plateau.?Ca2+ removal partly inhibited the Ca2+ signals.?In Ca2+-free medium, pretreatment with 1 mM NPC-15199 abolished the [Ca2+]i increase induced by 1 microM thapsigargin (an endoplasmic reticulum Ca2+ pump inhibitor);?and after pretreatment with thapsigargin, NPC-15199-induced Ca2+ release was dramatically inhibited.?This indicates that NPC-15199 released internal Ca2+ mostly from the endoplasmic reticulum.?Adding 3 mM Ca2+ increased [Ca2+]i in cells pretreated with 1 mM NPC-15199 in Ca2+-free medium.?Together, the findings suggest that in BFTC bladder cancer cells, NPC-15199 induced Ca2+ release from the endoplasmic reticulum and activating Ca2+ entry.

Solubility Information

Solubility	DMSO: 25 mg/mL (70.74 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (5.66 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8296 mL	14.1479 mL	28.2957 mL
5 mM	0.5659 mL	2.8296 mL	5.6591 mL
10 mM	0.283 mL	1.4148 mL	2.8296 mL
50 mM	0.0566 mL	0.283 mL	0.5659 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Jan C R , Yu C C , Huang J K . NPC-15199, a novel anti-inflammatory agent, mobilizes intracellular Ca2+ in bladder female transitional carcinoma (BFTC) cells[J]. Chinese Journal of Physiology, 2000, 43(1):29-33.
Effect of NPC-15199 on Ca2+ levels in renal tubular cells