Product overview

Name: N-Arachidonylglycine (NAGly)
Cat No: HB0439
Short description: Endogenous GLYT2 inhibitor / Ca\textsubscript{v}3.1 / 3.2 / 3.3 current inhibitor
Biological description: Endogenous GLYT2 inhibitor (IC\textsubscript{50} = 3 µM) that displays little activity at GLYT1. Also reversibly inhibits Ca\textsubscript{v}3.1, Ca\textsubscript{v}3.2 and Ca\textsubscript{v}3.3 currents (EC\textsubscript{50} values are 1.3 µM, 600 nM and 1.6 µM respectively). Novel insulin secretagogue and natural ligand for orphan G-protein-coupled receptor, GPR18. Displays analgesic properties.
Alternative names: NAGly
Biological action: Inhibitor

Properties

Chemical name: \( N-(1\text{-oxo-5Z,8Z,11Z,14Z-eicosatetraenyl})glycine \)
Molecular Weight: 361.52
Chemical structure:

\[
\begin{aligned}
\text{Molecular Formula} & = C_{22}H_{35}NO_3 \\
\text{CAS Number} & = 179113-91-8 \\
\text{PubChem identifier} & = 5283389 \\
\text{SMILES} & = O=C(CCC/C=CC/C=CC/C=CC/C=CCCCC)NCC(=O)O \\
\text{InChiKey} & = YLEARPUNMCCKM-PDOFZRALJS-N
\end{aligned}
\]

Storing and Using Your Product

Storage instructions: -20°C (desiccate)
Solubility overview: soluble in ethanol (100mM)
Important: This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

References for N-Arachidonylglycine (NAGly)

Identification of N-arachidonylglycine, U18666A, and 4-androstene-3,17-dione as novel insulin Secretagogues.
PubMedID: 15967412
Identification of N-arachidonylglycine as the endogenous ligand for orphan G-protein-coupled receptor GPR18.


PubMedID: 16844083

T-type calcium channel inhibition underlies the analgesic effects of the endogenous lipoamino acids.


PubMedID: 19846698

Extracellular loops 2 and 4 of GLYT2 are required for N-arachidonylglycine inhibition of glycine transport.


PubMedID: 19875446