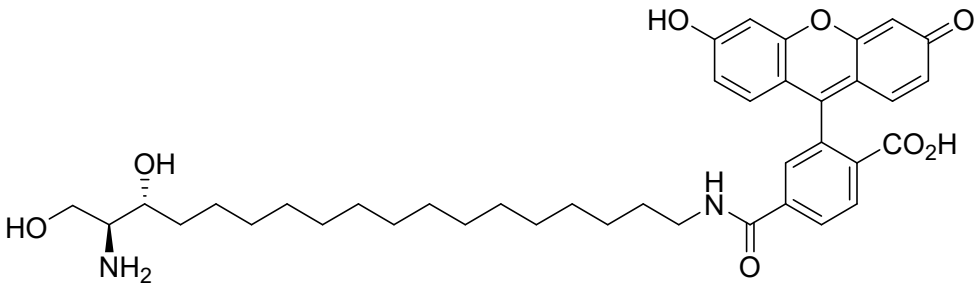
Echelon Biosciences Inc.

Sphinganine-fluorescein

Catalog number: S-110F



Molecular Formula: $C_{39}H_{50}N_2O_8$

MW: 674.84

CAS: n/a

Excitation Emission: 494/520 nm

Solubility: Methanol, >1 mg/mL. Stock solutions can be further diluted into neutral buffer

Storage and Handling: Store dry at -20 °C. Stock solutions should be stored frozen (-20 °C or below). Protect from light.

Background: Sphinganine (or Dihydrosphingosine) is an intermediate in the sphinglipid biosynthetic pathway. It is formed by the reduction of 3-Ketodihydrosphingosine by 3-Ketodihydrosphingosine Reductase (KDHR). Sphinganine is then acylated by Dihydroceramide synthase but can also act as a substrate for sphingosine kinases. Sphinganine can also inhibit Protein kinase C. Sphinganine-fluorescein is labeled at the terminal position.

References: 1) C.R. Gault, L.M. Obeid, Y.A. Hannum (2010) An overview of sphingolipid metabolism: from synthesis to breakdown *Adv. Exp.Med. Biol.*, **688**, 1.
2) Yung *et al* (1994) Sphinganine potentiation of dimethyl sulfoxide-induced granulocyte differentiation, increase of alkaline phosphatase activity and decrease of protein kinase C activity in a human leukemia cell line (HL-60). Biochem.Biophys.Res.Commun. ***199,*** 888.

Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. This product is manufactured and shipped only in small quantities, intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

Warranty and Disclaimer: Echelon warrants the product conforms to the specifications stated herein. In the event of nonconformity, Echelon will replace products or refund purchase price, at its sole option, and Echelon shall not be responsible for any other loss or damage, whether known or foreseeable to Echelon. No other warranties apply, express or implied, including but not limited to warranty of fitness for any purpose or implied warranty of merchantability. Purchaser is solely responsible for all consequences of its use of the product and Echelon assumes no responsibility therefore, including success of purchaser's research and development, or health or safety of any uses of the product.

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