

Product Data Sheet

Product Name: Docebenone (AA 861)

Cat. No.: GC31940

Chemical Properties

Cas. No. 80809-81-0

SMILES O=C1C(CCCCC#CCCC#CCO)=C(C)C(C(C)=C1C)=O

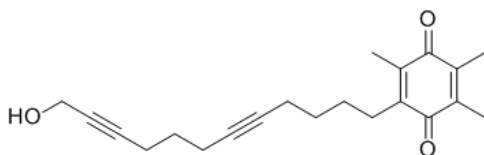
Formula $C_{21}H_{26}O_3$ M.Wt 326.43

Solubility DMSO: 250 mg/mL (765.86 mM) Storage Store at -20°C

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



Protocol

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

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Animal experiment: Rats[3]Pancreatitis is induced in rats by retrograde injection of 0.4 mL/kg body wt of 6% taurocholic acid into the pancreatic duct. The animals are divided into three groups: control group; administered Docebenone in a single dose of 30 mg/kg; and administered Docebenone in a single dose of 60 mg/kg. The following parameters are examined: serum amylase, lipase, trypsin, blood sugar, and survival rate[3].

References:

- [1]. Nam YH, et al. Leukotriene B(4) receptors BLT1 and BLT2 are involved in interleukin-8 production in human neutrophils induced by Trichomonas vaginalis-derived secretory products. Inflamm Res. 2012 Feb;61(2):97-102.
- [2]. Huang JK, et al. AA-861-induced Ca(2+) mobilization in Madin Darby canine kidney cells. Toxicol Appl Pharmacol. 1999 Dec 1;161(2):202-8.
- [3]. Kiriya M, et al. Protective effect of AA-861 (5-lipoxygenase inhibitor) on experimental acute necrotizing pancreatitis in rats. Int J Pancreatol. 1993 Jun;13(3):201-8.
- [4]. Yamamura H, et al. Effect of AA-861, a selective 5-lipoxygenase inhibitor, on models of allergy in several species. Jpn J Pharmacol. 1988 Jul;47(3):261-71.

Background

Docebenone (AA 861) is a potent, selective and orally active 5-LO (5-lipoxygenase) inhibitor.

Treatment of trichomonads with the 5-LO inhibitor Docebenone, significantly inhibits the ability of trichomonads to secrete LTB₄ compared to results for trichomonads treated with medium.

Docebenone strongly abolishes the stimulatory effect of TvSP on IL-8 production[1]. Docebenone at 10-200 µM increases [Ca²⁺]_i concentration dependently[2].

Docebenone might protect experimental acute necrotizing pancreatitis in rats[3]. Docebenone suppresses the release of SRS-A by 55-97%, dose-dependently in doses of 10⁻⁸-10⁻⁵ M in monkeys. The antigen-induced SRS-A release from these fragments is dose dependently inhibited by 25-93% of Docebenone, with doses of 10⁻⁸-10⁻⁵ M[4].

- [1]. Nam YH, et al. Leukotriene B(4) receptors BLT1 and BLT2 are involved in interleukin-8

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production in human neutrophils induced by *Trichomonas vaginalis*-derived secretory products. *Inflamm Res.* 2012 Feb;61(2):97-102. [2]. Huang JK, et al. AA-861-induced Ca^{2+} mobilization in Madin Darby canine kidney cells. *Toxicol Appl Pharmacol.* 1999 Dec 1;161(2):202-8. [3]. Kiriya M, et al. Protective effect of AA-861 (5-lipoxygenase inhibitor) on experimental acute necrotizing pancreatitis in rats. *Int J Pancreatol.* 1993 Jun;13(3):201-8. [4]. Yamamura H, et al. Effect of AA-861, a selective 5-lipoxygenase inhibitor, on models of allergy in several species. *Jpn J Pharmacol.* 1988 Jul;47(3):261-71.

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