TOCRIS
a bio-techne brand

Print Date: Jan 10th 2022

Certificate of Analysis

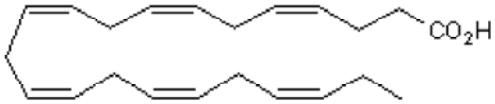
www.tocris.com

Product Name: **Docosahexaenoic acid** **Catalog No.: 3687** **Batch No.: 12**

CAS Number: 6217-54-5

IUPAC Name: (4Z,7Z,10Z,13Z,16Z,19Z)-4,7,10,13,16,19-Docosahexaenoic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	$C_{22}H_{32}O_2$
Batch Molecular Weight:	328.49
Physical Appearance:	Colourless liquid
Solubility:	DMSO to 100 mM ethanol to 100 mM
Storage:	Store at -20°C
Batch Molecular Structure:	

2. ANALYTICAL DATA

GC:	Shows 98.9% purity
^{1}H NMR:	Consistent with structure
Mass Spectrum:	Consistent with structure

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956

Product Name: **Docosahexaenoic acid** **Catalog No.: 3687** **Batch No.: 12**

CAS Number: 6217-54-5

IUPAC Name: (4Z,7Z,10Z,13Z,16Z,19Z)-4,7,10,13,16,19-Docosahexaenoic acid

Description:

Docosahexaenoic acid is a endogenous omega-3 fatty acid. Acts as a selective retinoid X receptor (RXR) agonist that displays no activity at RAR, thyroid hormone receptor or the vitamin D receptor (VDR). Activates all three RXR isoforms. Also shown to inhibit Aβ1-42 fibrillation and toxicity in vitro.

Physical and Chemical Properties:

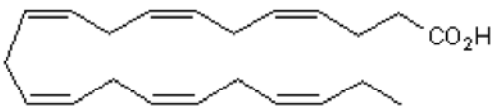
Batch Molecular Formula: $C_{22}H_{32}O_2$

Batch Molecular Weight: 328.49

Physical Appearance: Colourless liquid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C. This product is packaged under an inert atmosphere.

Solubility & Usage Info:

DMSO to 100 mM
ethanol to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Hossain *et al* (2009) Mechanism of docosahexaenoic acid-induced inhibition of *in vitro* $A\beta_{1-42}$ fibrillation and $A\beta_{1-42}$-induced toxicity in SH-S5Y5 cells. J.Neurochem. ***111*** 568. PMID: 19686246.

Zapata-Gonzalez *et al* (2008) Human dendritic cell activities are modulated by the omega-3 fatty acid, docosahexaenoic acid, mainly through PPARγ: RXR heterodimers: comparison with other polyunsaturated fatty acids. J.Leukoc.Biol. ***84*** 1172. PMID: 18632990.

Mata de Urqunia *et al* (2000) Docosahexaenoic acid, a ligand for the retinoid X receptor in mouse brain. Science ***290*** 2140. PMID: 11118147.