Structure

Origin: Humcola sp. FO-2942

CAS Registry Number: 169181-28-6

CA Index Name: N-[4-[[4-[(2,4-Dimethoxy-6-

methylbenzoyl)oxy]-2-hydroxy-6-methylbenzoyl]oxy]-2-hydroxy-6-methylbenzoyl]-L-alanine

Appearance: pale white powder

Molecular Formula/ Weight: C₂₉H₂₉NO₁₁=567.55

Melting Point: 220-221°C Purity:>95.0% by HPLC

Solubility: Sol. in MeOH, Benzene, EtOAc

Inso. in water, Hexane

pKa: log P:

Background Information:

Biological activity: Diacylglycerol Acyltransferase (DGAT) is exclusively involved in triacetylglycerol formation. Excessive accumulation of triacetylglycerol can cause fatty liver, obesity and hypertriglyceridemia, which lead to serious diseases such as atherosclerosis, diabetes and metabolic disorders. Therefore, DGAT is target for pharmaceutical inhibition. The inhibitory activity of DGAT was tested by an enzyme assay using rat liver microsomes and by a using RAJI cells. Amidepsines are the first DGAT inhibitors.

Handling and Storage:

Store at -20°C.

References:

- 1. H.Tomoda et al., J.Antibiot., 48, 937 (1995).
- 2. H.Tomoda et al., J.Antibiot., 48, 942 (1995).
- 3. H.Tomoda et al., J.Antibiot., 49, 929 (1996).
- 4. J.A.Elix et al., Aust.J. Chem., 34, 1757 (1981).