

Product Datasheet

Lipid 5 (orb654566)

Description

Lipid 5 is an amino lipid that affords efficient mRNA delivery in rodent and primate models. Lipid 5 shows optimal pharmacokinetics and non-toxic side effects. Replacement of the linoleic tail with a primary ester-containing lipid tail (Lipid 5) provides increased expression and optimal tissue clearance. The metabolite identification studies with Lipid 5 indicated that hydrolysis of the primary ester is the first step in the metabolism of the lipid[1]. Clearance of Lipid 5 and MC3 from multiple mouse tissues is measured after dosing 0.05 mg/kg mRNA on days 1, 8, and 15 in CD-1 female mice. Liver and spleen have the highest levels of Lipid 5, however, significantly lower levels than MC3. Lipid 5 is detected in plasma, lung, and kidney, but not in heart[1].

Note

For research use only

Formula

$C_{44}H_{87}NO_5$

MW

710.165

CAS Number

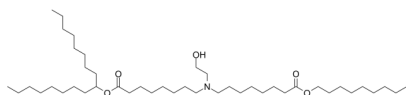
[2089251-33-0]

SMILES

O=C(CCCCCCN(CCCCCC(=O)OCCCCCCCC)CCO)OC(CCCCCC)CCCCCCC

Expiration Date

12 months from date of receipt.



Chemical structure of orb654566

Biorbyt Ltd.

7 Signet Court, Swann's Road,
Cambridge, CB5 8LA, United Kingdom
Email: info@biorbyt.com, support@biorbyt.com
Phone: [+44 \(0\) 1223 859-353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)

Biorbyt LLC.

68 TW Alexander Drive,
Durham, NC, 27713, United States
Email: info@biorbyt.com, support@biorbyt.com
Phone: [+1 \(415\) 906-5211](tel:+1(415)9065211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)