

# DC82003 | A12-Iso5-2DC18

## Instructions for Use

A12-Iso5-2DC18 is a novel amine containing lipid can be used for mRNA delivery, activate the stimulator of interferon genes (STING) pathway, and exhibit anti-tumor immunity.

## Product information

|                    |                                                                                                                                                                     |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAS No.            | Not available                                                                                                                                                       |
| Chemical Name      | A12-Iso5-2DC18                                                                                                                                                      |
| Formula            | C45H85N3O2                                                                                                                                                          |
| M.Wt               | 700.18                                                                                                                                                              |
| Purity             | ELSD-HPLC>95%                                                                                                                                                       |
| Storage            | Original product: up to 1 year under the storage conditions stated on the vial, kept tightly sealed. Stock solutions: aliquots at -20°C, generally up to one month. |
| Shipping condition | Ships from Shanghai. Pure lipid is stable during ice-pack transport.                                                                                                |

## Formulation & study context

Literature values apply to the cited study only. Administration routes describe research, not clinical instructions.

A complete product-specific formulation has not been verified. No standard ratio is substituted.

|                      |                                      |
|----------------------|--------------------------------------|
| N/P ratio            | Not reported in the verified record  |
| Cargo                | Not available in the verified record |
| Administration route | Not available in the verified record |
| Animal model         | Not available in the verified record |
| Formulation process  | Not available in the verified record |

N/P is a nitrogen-to-phosphate molar ratio. Lipid:cargo mass ratio is a different quantity and must not be used as N/P.

## Stock-solution preparation table

Calculated using product-page MW: 700.18 g/mol. Volumes are final solution volumes.

| Mass  | 1 mM      | 5 mM      | 10 mM    |
|-------|-----------|-----------|----------|
| 10 mg | 14.282 mL | 2.856 mL  | 1.428 mL |
| 25 mg | 35.705 mL | 7.141 mL  | 3.571 mL |
| 50 mg | 71.410 mL | 14.282 mL | 7.141 mL |

| Mass   | 1 mM       | 5 mM      | 10 mM     |
|--------|------------|-----------|-----------|
| 100 mg | 142.820 mL | 28.564 mL | 14.282 mL |
| 250 mg | 357.051 mL | 71.410 mL | 35.705 mL |

Volume (mL) = mass (mg) × 1000 / [MW (g/mol) × concentration (mM)]. Mathematical conversions only; not measured solubility. Confirm solvent compatibility and the exact material before preparation.

## Handling & storage

Provided that storage conditions are as stated on the product vial and the vial is kept tightly sealed, the product can be stored for up to 1 year.

Wherever possible, prepare and use solutions on the same day. If stock solutions must be prepared in advance, store them as aliquots in tightly sealed vials at -20°C. Generally, these will be usable for up to one month.

Before use, and prior to opening the vial, allow the product to equilibrate to room temperature for at least 1 hour.

## References

Synthesis of ionizable lipidoids for pharmaceutical use

By: Miao, Lei; Li, Linxian; Anderson, Daniel Griffith; Huang, Yuxuan

World Intellectual Property Organization, WO2020047399 A1 2020-03-05.