# DC60880 | 2Ac3-C18

## Instructions for Use

2Ac3-C18 is a unique ionizable lipid with a distinct degradable core structure featuring 2 acrylate units and 3 amine groups—linked to a C18 alkyl chain. Its LNPs (formulated with DOPE/cholesterol/DMG-PEG2000) exhibit spleen-specific mRNA delivery in vivo.

## Product information

| | |
|---|---|
| CAS No. | Not available |
| Chemical Name | 2Ac3-C18 |
| Formula | C65H114O8N2 |
| M.Wt | 1,051.63 |
| Purity | 98% |
| 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: 1051.63 g/mol. Volumes are final solution volumes.

| Mass | 1 mM | 5 mM | 10 mM |
|---|---|---|---|
| 10 mg | 9.509 mL | 1.902 mL | 0.951 mL |
| 25 mg | 23.773 mL | 4.755 mL | 2.377 mL |
| 50 mg | 47.545 mL | 9.509 mL | 4.755 mL |

| Mass | 1 mM | 5 mM | 10 mM |
|---|---|---|---|
| 100 mg | 95.090 mL | 19.018 mL | 9.509 mL |
| 250 mg | 237.726 mL | 47.545 mL | 23.773 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

Not available