

# DC65851 | CL15F6

## Instructions for Use

CL15F6 is an ionizable cationic lipid ( $pK_a = 6.75$ ).<sup>1</sup> It has been used in the formation of lipid nanoparticles (LNPs) for the delivery of mRNA and polymer-lipid hybrid nanoparticles for the delivery of plasmid DNA in vitro.<sup>1,2</sup>

## Product information

|                    |                                                                                                                                                                     |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAS No.            | Not available                                                                                                                                                       |
| Chemical Name      | CL15F6                                                                                                                                                              |
| Formula            | C <sub>56</sub> H <sub>107</sub> NO <sub>7</sub>                                                                                                                    |
| M.Wt               | 906.5                                                                                                                                                               |
| 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: 906.5 g/mol. Volumes are final solution volumes.

| Mass  | 1 mM      | 5 mM      | 10 mM    |
|-------|-----------|-----------|----------|
| 10 mg | 11.031 mL | 2.206 mL  | 1.103 mL |
| 25 mg | 27.579 mL | 5.516 mL  | 2.758 mL |
| 50 mg | 55.157 mL | 11.031 mL | 5.516 mL |

| Mass   | 1 mM       | 5 mM      | 10 mM     |
|--------|------------|-----------|-----------|
| 100 mg | 110.314 mL | 22.063 mL | 11.031 mL |
| 250 mg | 275.786 mL | 55.157 mL | 27.579 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