

DC66286 | Di-n-decyldimethylammonium Bromide(DDAB)

Instructions for Use

DDAB, also known as dodecyltrimethylammonium bromide, is a cationic surfactant with specific solubility, stability, and storage conditions.

1. Solubility: DDAB is soluble in water and organic solvents such as ethanol and chloroform. It forms clear solutions in water, but can become turbid at high concentrations or low temperatures. It has a higher solubility in organic solvents compared to CTAB.

2. Stability: DDAB is relatively stable under normal storage conditions. However, it can undergo degradation and lose its surfactant properties if exposed to extreme temperatures, humidity, or oxidizing agents for extended periods. It is important to store DDAB in a cool, dry place away from direct sunlight.

3. Storage conditions: DDAB should be stored in a tightly sealed container to prevent moisture absorption and contamination. It is recommended to store it at room temperature (around 20-25°C) or in a refrigerator (2-8°C) to maintain its stability and extend its shelf life.

Product information

CAS No.	Not available
Chemical Name	Di-n-decyldimethylammonium Bromide(DDAB)
Formula	C22H48BRN
M.Wt	406.5272
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: 406.5272 g/mol. Volumes are final solution volumes.

Mass	1 mM	5 mM	10 mM
10 mg	24.599 mL	4.920 mL	2.460 mL
25 mg	61.497 mL	12.299 mL	6.150 mL
50 mg	122.993 mL	24.599 mL	12.299 mL
100 mg	245.986 mL	49.197 mL	24.599 mL
250 mg	614.965 mL	122.993 mL	61.497 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