

PRODUCT INFORMATION



DC4 Crosslinker

Item No. 14734

CAS Registry No.: 1374647-94-5
Formal Name: 1,4-bis[4-[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-oxobutyl]-1,4-diazoniabicyclo[2.2.2]octane, dibromide

MF: C₂₂H₃₂N₄O₈ • 2Br

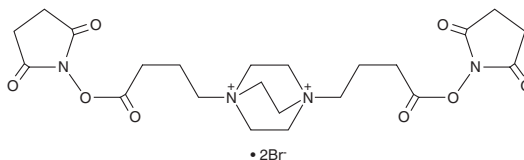
FW: 640.3

Purity: ≥98%

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

DC4 Crosslinker is supplied as a crystalline solid. A stock solution may be made by dissolving the DC4 crosslinker in the solvent of choice. DC4 Crosslinker is soluble in organic solvents such as DMSO, which should be purged with an inert gas, at a concentration of approximately 11 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of DC4 crosslinker can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of DC4 crosslinker in PBS, pH 7.2, is approximately 3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

DC4 crosslinker is a mass spectrometry-cleavable crosslinking reagent (18Å in length) that contains two intrinsic positive charges, which allow cross-linked peptides to fragment into their component peptides by collision-induced dissociation or in-source decay.¹ Initial fragmentation events result in cleavage on either side of the positive charges so that cross-linked peptides can be identified as pairs of ions separated by defined masses.¹ Additionally, these two intact peptide fragments can be further fragmented to yield a series of b- and y-ions for peptide identification.¹

Reference

1. Clifford-Nunn, B., Showalter, H.D., and Andrews, P.C. Quaternary diamines as mass spectrometry cleavable crosslinkers for protein interactions. *J. Am. Soc. Mass Spectrom.* **23**(2), 201-212 (2012).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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