

## Produktinformation



Forschungsprodukte & Biochemikalien
Zellkultur & Verbrauchsmaterial
Diagnostik & molekulare Diagnostik
Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



Lieferung & Zahlungsart siehe unsere Liefer- und Versandbedingungen

## Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien T. +43(0)1 489 3961-0 F. +43(0)1 489 3961-7 <u>mail@szabo-scandic.com</u> www.szabo-scandic.com

# **PRODUCT** INFORMATION



**Disuccinimidyl Glutarate** 

Item No. 20646

CAS Registry No.: Formal Name:	79642-50-5 pentanedioic acid, 1,5- <i>bis</i> (2,5- dioxo-1-pyrrolidinyl) ester
Synonym:	DSG N
MF:	$C_{13}H_{14}N_2O_8$
FW:	326.3 N
Purity:	≥95%
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly

#### Laboratory Procedures

Disuccinimidyl glutarate (DSG) is supplied as a crystalline solid. A stock solution may be made by dissolving the DSG in the solvent of choice. DSG is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of DSG in these solvents is approximately 20 and 10 mg/ml, respectively.

DSG is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, DSG should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. DSG has a solubility of approximately 0.15 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

DSG is a homobifunctional crosslinking agent that contains amine-reactive N-hydroxysuccinimide (NHS) ester groups at each end.<sup>1,2</sup> DSG is membrane-permeable and non-cleavable. DSG can be combined with formaldehyde fixation to improve the detection of specific protein-DNA complexes.<sup>3</sup>

#### References

- 1. Akin, B.L. and Jones, L.R. Characterizing phospholamban to sarco(endo)plasmic reticulum Ca<sup>2+</sup>-ATPase 2a (SERCA2a) protein binding interactions in human cardiac sarcoplasmic reticulum vesicles using chemical cross-linking. J. Biol. Chem. 287(10), 7582-7593 (2012).
- 2. Huang, B.X., Kim, H.-Y., and Dass, C. Probing three-dimensional structure of bovine serum albumin by chemical cross-linking and mass spectrometry. J. Am. Soc. Mass Spectrom. 15, 1237-1247 (2004).
- 3. Aoki, T., Wolle, D., Preger-Ben Noon, E., et al. Bi-functional cross-linking reagents efficiently capture protein-DNA complexes in Drosophila embryos. Fly 8(1), 43-51 (2014).

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

#### SAFFTY 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.

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/18/2016

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 **FAX:** [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM