

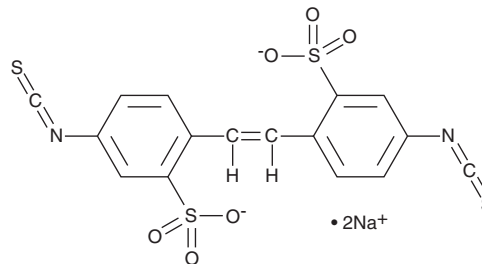
PRODUCT INFORMATION



DIDS (sodium salt)

Item No. 16125

CAS Registry No.: 67483-13-0
Formal Name: 2,2'-(1,2-ethenediyl)bis[5-isothiocyanatobenzenesulfonic acid], disodium salt
Synonyms: 4,4'-Diisothiocyanato-2,2'-stilbenedisulfonic acid, MDL 101114ZA
MF: C₁₆H₈N₂O₆S₄ • 2Na
FW: 498.5
Purity: ≥95%
UV/Vis.: λ_{max}: 344, 353 nm
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

DIDS (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the DIDS (sodium salt) in the solvent of choice, which should be purged with an inert gas. DIDS (sodium salt) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of DIDS (sodium salt) in these solvents is approximately 20 and 30 mg/ml, respectively.

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 DIDS (sodium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of DIDS (sodium salt) in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

DIDS is a stilbene sulfonate that inhibits anionic transport. It has been used to inhibit Cl⁻ uptake through plasma membrane-localized Cl⁻ channels in order to study chloride transport.¹ It also effectively inhibits various sodium-coupled bicarbonate transporters.²

References

1. Pusch, M., Zifarelli, G., Murgia, A., *et al.* Channel or transporter? The CLC saga continues. *Exp. Physiol.* **91(1)**, 149-152 (2006).
2. Boron, W.F. Sodium-coupled bicarbonate transporters. *JOP* **2(4 Suppl)**, 176-181 (2001).

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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