PRODUCT INFORMATION



1,3-Benzodioxole-5,6-diamine (hydrochloride)

Item No. 34308

CAS Registry No.: Synonyms:	81864-15-5 DMB, 1,2-Diamino-4,5-methylenedioxybenzene,	
	4,5-Methylenedioxy-1,2-phenylenediamine	H ₂ N O
MF:	$C_7H_8N_2O_2 \bullet 2HCI$	1 > 1 > 1
FW:	225.1	
Purity:	≥98%	H ₂ N -0
Supplied as:	A solid	• 2HCI
Storage:	-20°C	
Stability:	≥4 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

Laboratory Procedures

1,3-Benzodioxole-5,6-diamine (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the 1,3-benzodioxole-5,6-diamine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. 1,3-Benzodioxole-5,6-diamine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 1,3-benzodioxole-5,6-diamine (hydrochloride) in these solvents is approximately 1, 10, and 15 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 1,3-benzodioxole-5,6-diamine (hydrochloride) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of 1,3-benzodioxole-5,6-diamine (hydrochloride) in PBS (pH 7.2) is approximately 10 mg/ ml. We do not recommend storing the aqueous solution for more than one day.

Description

1,3-Benzodioxole-5,6-diamine is a fluorescent derivatization reagent.¹⁻³ It has been commonly used for the derivatization of α -keto, neuraminic, and sialic acids for detection by fluorometric HPLC.

References

- 1. Hara, S., Yamaguchi, M., Takemori, Y., et al. Highly sensitive determination of N-acetyl- and N-glycolylneuraminic acids in human serum and urine and rat serum by reversed-phase liquid chromatography with fluorescence detection. J. Chromatogr. 377, 111-119 (1986).
- 2. Hayakawa, K., De Felice, C., Watanabe, T., et al. Determination of free N-acetylneuraminic acid in human body fluids by high-performance liquid chromatography with fluorimetric detection. J. Chromatogr. 620(1), 25-31 (1993).
- 3. Martín, M.J., Vázquez, E., and Rueda, R. Application of a sensitive fluorometric HPLC assay to determine the sialic acid content of infant formulas. Anal. Bioanal. Chem. 387(8), 2943-2949 (2007).

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.

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