

# Methylene Blue Alkyne

Catalog Number: 833

Unit Size: 1 mg

## Product Details

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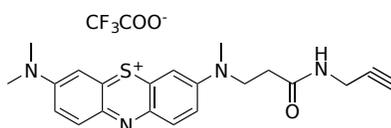
Storage Conditions	Freeze (< -15 °C), Minimize light exposure
Expiration Date	12 months upon receiving

## Chemical Properties

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Appearance	Solid dark blue
Molecular Weight	492.52
Soluble In	DMSO

Chemical Structure



## Spectral Properties

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Excitation Wavelength	N/A
Emission Wavelength	N/A

## Applications

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Methylene Blue (MB) is widely used as a redox indicator in nucleic acid research. Methylene Blue Alkyne is an excellent building block for preparing MB-labeled nucleic acid probes from azido-modified oligonucleotides, including picolyl azide-modified oligonucleotides via the well-known click chemistry. MB is also a well-known photosensitizer used in photodynamic therapy (PDT) and investigated for the topical treatment of various skin infections via PDT modality. It is a common biological stain, commonly used in medical laboratories to stain cells and tissues for microscopic examination. It can help visualize cellular structures and identify abnormalities. In addition, MB has been studied for its potential role in treating neurodegenerative diseases, such as Alzheimer's and Parkinson's disease. Some research suggests it might have a protective effect on neurons and mitochondrial function.