# 5-FAM Cysteamine

Catalog Number: 5210
Unit Size: 5 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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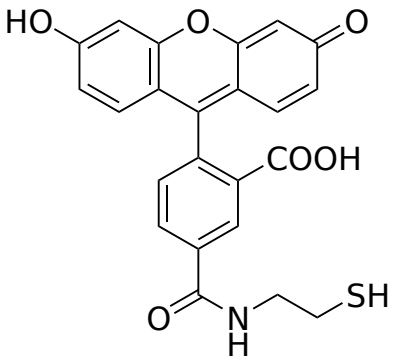
|---|---|
| Appearance | Solid orange |
| Molecular Weight | 435.45 |
| Soluble In | DMF |
| Chemical Structure |  |



## Spectral Properties

| | |
|---|---|
| Excitation Wavelength | 493 nm |
| Emission Wavelength | 517 nm |

## Applications

5-Carboxyfluorescein (also known as 5-FAM or 5-Fluorescein) is a fluorescent dye commonly used in molecular biology and biochemistry research. It belongs to the family of fluorescein derivatives and is often used as a fluorescent label or tracer in various applications. 5-FAM cysteamine contains a free thiol group that readily reacts with maleimide and other SH-reactive groups such as iodoacetamide and vinyl sulfone etc. It is an excellent building block for developing fluorescent probes with maleimide-modified biomolecules. The resulting probes exhibit strong fluorescence when excited with light in the blue to green spectral range (absorption maximum at approximately 495 nm and emission maximum at approximately 520 nm). Due to its bright fluorescence, stability, and compatibility with various detection systems, 5-FAM probes are widely used as fluorescent labels for biomolecules. Overall, 5-Carboxyfluorescein is a versatile and widely used fluorescent dye in molecular biology research, offering excellent brightness and compatibility with various labeling and detection methods. Its fluorescent properties make it a valuable tool for visualizing and studying biological molecules and processes. It can be employed to label nucleotides, oligonucleotides, peptides, proteins, antibodies, or other molecules of interest. The labeled molecules can be visualized and detected using fluorescence microscopy, flow cytometry, or other fluorescence-based techniques.