

## Cy3 aldehyde

Catalog number: 9010 Unit size: 5 mg

| Product Details       |   |
|-----------------------|---|
| Storage Conditions    | Freeze (<-15 °C), Minimize light exposure |
| Expiration Date       | 12 months upon receiving                  |
| Chemical Properties   |   |
| Appearance            | Solid                                     |
| Soluble In            | DMSO                                      |
| Spectral Properties   |   |
| Excitation Wavelength | 555 nm                                    |
| Emission Wavelength   | 569 nm                                    |
|                       |   |

## Applications

Cy3 aldehyde is a reactive fluorescent dye that can react with an amine, hydrazine or hydroxylamine. Aldehyde group is reactive toward amines, hydrazide or hydroxylamine groups from pH 5-9. Unlike amine reactive succinimidyl ester group (NHS), aldehyde can react with N-terminal amine groups at acidic pH, a condition sometimes required for certain bioconjugation reactions. Aldehyde reacts with amine group to form an intermediate Schiff bond. Further reduction with hydride will form a stable C-N bond. Reaction between aldehyde and other groups allows site-specific conjugation and labeling of fluorescein dyes to desired position on targeted molecules. Conjugated Cy3 dye can be easily detected by a common fluorescence instrument under TRITC or Cy3 channel.