Data Sheet (Cat.No.TD0026)

TargetMol

Super Fluor 647, SE

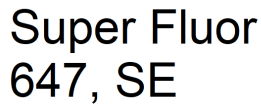
Chemical Properties

CAS No. :

Formula:

Molecular Weight:

Storage: Store at low temperature,Keep away from direct sunlight
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.



Biological Description

Description	Super Fluor 647, SE is a reactive dye for the labeling of antibodies, peptides, proteins, tracers, and amplification substrates optimized for cellular labeling and detection. Super Fluor 647 dye molecules can be attached to proteins at high molar ratios without significant self-quenching, enabling brighter conjugates and more sensitive detection.
Targets(IC50)	Others
In vitro	Instructions I. Solution preparation 1. Stock solution: Dissolve Super Fluor 647, SE in DMSO to prepare a 10 mM stock solution, and store the stock solution at -80°C after aliquoting. Avoid repeated freezing and thawing to maintain its activity. 2. Working solution: Dilute the stock solution to the required working concentration before the labeling reaction. The specific concentration should be optimized according to the concentration of the molecule to be labeled and the experimental requirements. II. Operation steps Labeling reaction 1. Protein dissolution: Dissolve the protein to be labeled in a suitable buffer to ensure that the protein concentration is suitable for the labeling reaction, usually 1-10 mg/mL. 2. Dye addition: Slowly add an appropriate amount of Super Fluor 647, SE solution to the protein solution to ensure that the ratio of protein to dye is appropriate (optimized according to specific experimental requirements). 3. Reaction incubation: Incubate the reaction mixture at room temperature in the dark for about 1 hour, and gently blow to promote the reaction during this period. 4 Purification and verification Purification: After the labeling reaction is completed, use appropriate methods (such as gel filtration, ultrafiltration or dialysis) to remove unreacted free dye and purify the labeled protein. Verification: Calculate the labeling efficiency (F/P value) by measuring the absorbance of protein and dye. The specific method includes measuring the absorbance at 280 nm and 650 nm, and calculating the protein concentration and labeling ratio according to the formula. 5. During detection, the excitation wavelength of Super Fluor 647 is about 650 nm and the emission wavelength is about 665 nm.

In vitro	The above information is based on published literature. Experimental procedures should be appropriately modified to meet specific research demands.

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