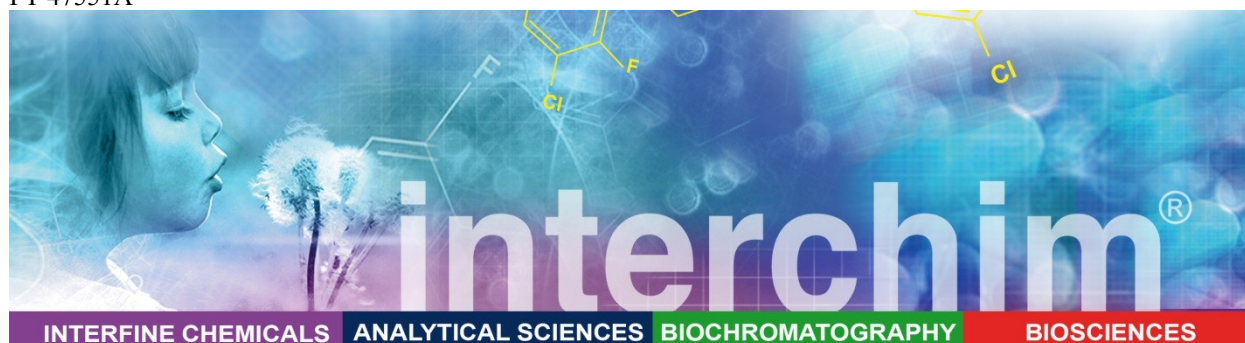


FT-47551A



# Fluorescein-X5-Maleimide

## Products Description

<b>Name :</b>	<b>Fluorescein-X5-Maleimide</b>
<b>Catalog Number :</b>	<a href="#">FP-47551A</a> , 25 mg
<b>Structure :</b>	C <sub>24</sub> H <sub>13</sub> NO <sub>7</sub>
<b>Molecular Weight :</b>	427.34
<b>CAS :</b>	75350-46-8
<b>Soluble in:</b>	DMSO, DMF, water (pH>6)
<b>Absorption / Emission :</b>	$\lambda_{exc}/\lambda_{em} = 491 \text{ nm} / 515 \text{ nm}$
<b>EC (M<sup>-1</sup> cm<sup>-1</sup>) :</b>	80 000

## Introduction

Fluorescein-X5- Maleimide is the most popular for dye for protein and peptide labeling through thiols and modification of thiols . It is also used for the cys containing proteins study

## Directions for use

### Handling and Storage

A stock solution is prepared at 10-20 mM in DMSO or DMF. Do not store more than 24 hours.

### Guidelines for use –

- 1- Prepare the protein solution at 50-100µM concentration in a buffer as PBS, Tris or Hepes Buffer with pH between 7.0-7.5.
- 2- Prepare the stock solution of the Fluorescein-X5- Maleimide in DMF or DMSO immediately before use.
- 3- Add the maleimide stock solution dropwise to the stirred protein solution at room temperature or at 4°C. Typically, the reaction takes about 2 hours to complete at room temperature, or overnight to complete at 4°C. Enough of the maleimide stock solution should be added so that the protein/maleimide molar ration is about 10-20.
- 4- Upon completion of the labeling reaction, the remaining maleimide is consumed by adding an excess of glutathione, mercaptoethanol or other small thiol compounds.
- 5- Separate the labeled protein via gel filtration or dialysis.

## References

- **Bigelow DJ, et al.**, « Frequency-domain fluorescence spectroscopy resolves the location of maleimide-directed spectroscopic probes within the tertiary structure of the Ca-ATPase of sarcoplasmic reticulum. », *Biochemistry*, **30**, 2113 (1991)
- **Korkmaz B., et al.**, « Inhibition of Neutrophil Elastase by α1-Protease Inhibitor at the Surface of Human Polymorphonuclear Neutrophils », *J.Anim.Sci.*, **83**, 2162-2174 (2005)
- **Meuller J, et al.**, « The Membrane Topology of Proton-pumping *Escherichia coli* Transhydrogenase Determined by Cysteine Labeling », *J Biol Chem*, **274**, 19072 (1999) [Article](#)
- **Polyakov V, et al.**, « Novel Tat-peptide chelates for direct transduction of technetium-99m and rhenium into human cells for imaging and radiotherapy. », *Bioconjug Chem*, **11**, 762 (2000)
- **StephensAN, et al.**, « The Molecular Neighborhood of Subunit 8 of Yeast Mitochondrial F<sub>1</sub>F<sub>0</sub>-ATP Synthase Probed by Cysteine Scanning Mutagenesis and Chemical Modification », *J. Biol. Chem*, **278(20)**, 17867 (2003) [Article](#)
- **van der Sluis EO, et al.**, « SecY-SecY and SecY-SecG contacts revealed by site-specific crosslinking. », *FEBS Lett* 527, 159 (2002)

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### Related products

- FluoProbes® 488-Maleimide, FP-BA6810
- FluoProbes® 505-X5-Maleimide, FP-BA34

### Ordering information

Catalog size quantities and prices may be found at <http://www.interchim.com>.

Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask : FluoProbes® / Interchim; Hotline : +33(0)4 70 03 73 06

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