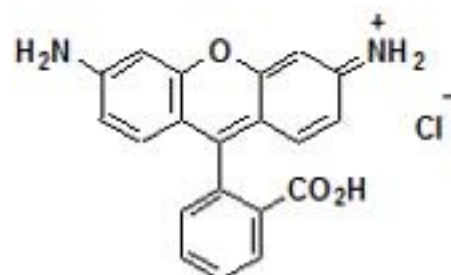


## Rhodamine 110, reference standard

### Product Description

<b>Name :</b>	<b>R110</b> Rhodamine 110 chloride (Rh 110) Xanthylium, 3,6-diamino-9-(2-carboxyphenyl)-, chloride
<b>Catalog Number :</b>	FP-M1366A, 25mg FP-M1366B, 100mg FP-M1366C, 1g FP-M1366D, 5g
<b>Molecular Weight :</b>	MW= 366.80 C <sub>20</sub> H <sub>15</sub> ClN <sub>2</sub> O <sub>3</sub>
<b>Solubility:</b>	DMSO, DMF and CH <sub>3</sub> OH
<b>Fluorescence:</b>	$\lambda_{exc}/\lambda_{em}$ (CH <sub>3</sub> OH) = 506/528nm



**Storage:** -20°C (stable at room temperature for short term) <sup>(M)</sup>. Protect from light and moisture

### Introduction

This compound is used as a building block to label a variety of compounds -amino Acids and peptides- for enzyme substrates, i.e. caspases/apoptosis<sup>f</sup>. It is also used as a calibration standard for R110-based enzyme substrates, and as a probes for cell biology study, accumulating in cells<sup>f</sup>. Eventually it can be used label probes/ligands -i.e. antibodies- for detection techniques-.

Compared to AMC and AFC enzyme substrates, fluorogenic R110 substrates are generally more sensitive, giving longer absorption and fluorescence wavelength than AMC and AFC substrates.

### Directions for use

Protocols may be found in the litterature depending on application.

### References

- Ganesh S *et al.* Flow cytometric determination of aminopeptidase activities in viable cells using fluorogenic rhodamine 110 substrates, *Cytometry* 20, 334-340 (1995)
- Hug Hubert *et al.*; Rhodamine 110-Linked Amino Acids and Peptides as Substrates To Measure Caspase Activity upon Apoptosis Induction in Intact Cells. *Biochemistry*, 1999, 38 (42), pp 13906–13911 [Abstract](#)
- Jeannot Valérie; Intracellular Accumulation of Rhodamine 110 in Single Living Cells; *J. Histochem. and Cytochem.*, Vol. 45, 403-412; [Article](#)
- Kwok YC, Manz A, Shah convolution Fourier transform detection: multiple-sample injection technique, *Electrophoresis* 22, 222-9 (2001)
- Zhang X *et al.*, A fluorescence quenching method for the determination of nitrite with Rhodamine 110. *Spectrochim Acta A* 59, 1667-1672 (2003)

FT-M1366C

## Related / associated products and documents

See [BioSciences Innovations catalogue](#) and [e-search tool](#).

- Fluorescein, Reference standard, [FP-19365A](#)
- AMC, Reference standard, [FP-103335](#)
- AFC, Reference standard, [FP-30855B](#)
- Rhodamine 110 Labeling Kit microspin format -NH<sub>2</sub>, [FP-CJ0091](#); -SH, [FP-CJ0101](#)

## Ordering information

[Catalog size quantities and prices may be found at 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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