

# PRODUCT INFORMATION



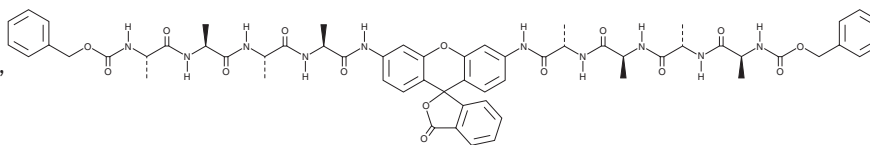
## (Z-Ala-Ala-Ala-Ala)2Rh110

Item No. 11675

CAS Registry No.: 149695-85-2

Formal Name: N-[(phenylmethoxy)carbonyl]-L-alanyl-L-alanyl-L-alanyl-N-[3-oxo-6'-[[N-[N-[N-[N-[(phenylmethoxy)carbonyl]-L-alanyl]-L-alanyl]-L-alanyl]-L-alanyl]amino]spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3'-yl]-L-alaninamide

Synonyms: (Z-Ala-Ala-Ala-Ala)2Rhodamine110, bis-(CBZ-L-alanyl-L-arginine amide) Rhodamine 110



MF: C<sub>60</sub>H<sub>66</sub>N<sub>10</sub>O<sub>15</sub>

FW: 1,167.2

Purity: ≥95%

UV/Vis.: λ<sub>max</sub>: 229, 234, 285 nm

Ex./Em. Max: 485/525 nm

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥2 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

(Z-Ala-Ala-Ala-Ala)2Rh110 is supplied as a crystalline solid. A stock solution may be made by dissolving the (Z-Ala-Ala-Ala-Ala)2Rh110 in the solvent of choice. (Z-Ala-Ala-Ala-Ala)2Rh110 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of (Z-Ala-Ala-Ala-Ala)2Rh110 in these solvents is approximately 2 mg/ml.

(Z-Ala-Ala-Ala-Ala)2Rh110 is sparingly soluble in aqueous solutions. For maximum solubility in aqueous buffers, (Z-Ala-Ala-Ala-Ala)2Rh110 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. (Z-Ala-Ala-Ala-Ala)2Rh110 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

(Z-Ala-Ala-Ala-Ala)2Rh110 is a sensitive fluorogenic elastase substrate.<sup>1</sup> The colorless and nonfluorescent (Z-Ala-Ala-Ala-Ala)2Rh110 is selectively cleaved by elastase to yield the highly fluorescent compound rhodamine 110, which can be analyzed with an excitation wavelength of 485 nm and emission wavelength of 525 nm.

### Reference

1. Johnson, A.F., Struthers, M.D., Pierson, K.B., *et al.* Nonisotopic DNA detection system employing elastase and a fluorogenic rhodamine substrate. *Anal. Chem.* **65**, 2352-2359 (1993).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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