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# (Z-DEVD)<sub>2</sub>-R110

Catalog Number	Packaging Size
C284	5 mg

Storage upon receipt: -20°C, protected from light

#### Introduction

(Z-DEVD)<sub>2</sub>-R110 is a fluorogenic enzyme substrate of caspase-3/7 that is widely used for high-throughput assays. Peptides are covalently linked to each of the amino groups on rhodamine 110 (R110), which suppresses the fluorescence of the dye. When the peptides are cleaved by the caspase, the substrate is converted first to the fluorescent monoamide and then to R110, with a further increase in fluorescence. The substrate can be used to continuously measure enzyme activity in cell extracts and purified enzyme preparations using a fluorometer or fluorescence microplate reader.

## **Specifications**

Label:	Rhodamine 110	
Ex/Em:	500/520 nm	
<b>Detection Method:</b>	Fluorescent	сн <sub>3</sub> сн <sub>3</sub> со <sub>2</sub> н со <sub>2</sub> н сн <sub>3</sub> сн <sub>3</sub> сн <sub>3</sub>
Molecular Formula:	C <sub>72</sub> H <sub>78</sub> N <sub>10</sub> O <sub>27</sub>	HN THE THE THE THE THE THE THE
Molecular Weight:	1515.46	NH CH2 CO2H C=O HO2C-CH2 HN
CAS Number:	-	° → o − cH₂ − O ← O ← O ← O ← O ← O ← O ← O ← O ← O
Storage Conditions:	-20°C, protected from light	
Shipping Condition:	Room Temperature	

### **Applications**

Caspase Substrate

#### References:

1. Sphingosine 1-phosphate-induced cell proliferation, survival, and related signaling events mediated by G protein-coupled receptors Edg3 and Edg5.

An S, Zheng Y, Bleu T

J Biol Chem (2000) 275:288-296

2. A role for hydrogen peroxide in the pro-apoptotic effects of photodynamic therapy.

Price M, Terlecky SR, Kessel D,

Photochem Photobiol (2009) 85:1491-1496

3. Photodynamic therapy and cell death pathways.

Kessel D, Oleinick NL,

Methods Mol Biol (2010) 635:35-46

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