

Revised: August 27, 2020

# **Product Information**

# Ac-DEVD-R110

Catalog Number: 10226

Unit Size: 1 mg

## Storage and Handling

Store at -20°C desiccated and protected from light. Product is stable for at least 24 months from date of receipt when stored as recommended as a solid.

Stock solutions may be prepared in DMSO. Solutions can be aliquoted and stored with desiccant and protected from light at -20°C, for up to 12 months.

#### Molecular Information: $C_{60}H_{70}N_{10}O_{25}$ Molecular Weight: 1331

Color and Form: Off-white solid Solubility: Soluble in DMSO Absorption/Emission: End product (R110): 496/520 nm (strong fluorescence)

Ac-DEVD-N N-DVED-Ac

Figure 1. Ac-DEVD-R110 (Rhodamine 110, bis-(N-Ac-L-aspartyl-L-glutamyl-L-valyl-1-aspartic acid amide))

# **Product Description**

Caspase-3 is an active cell-death protease involved in the execution phase of apoptosis, during which cells undergo morphological changes such as DNA fragmentation, chromatin condensation, and apoptotic body formation (1). Ac-DEVD-R110 (Rhodamine 110, bis-(N-Ac-L-aspartyl-L-glutamyl-L-valyl-1-aspartic acid amide)) is a fluorogenic substrate for caspase-3 and can be used to continuously measure the activity of caspase-3 in cell extracts, using a fluorometer or fluorescence microplate reader. Ac-DEVD-R110 contains two DEVD tetrapeptides and is hydrolyzed by caspase-3/7 in two successive steps to release the green fluorescent dye rhodamine 110 (R110)

### References

1) Cell Death Differ 6(2), 99(1999); 2) J Biol Chem 275, 288(2000); 3) Biochemistry 38(42), 13906(1999).

# **Related Products**

Catalog number	Product
90082	DMSO, Anhydrous, 10 mL
10202	AC-DEVD-AMC, 5 mg
10404	Ac-DEVD-CHO Caspase-3 Inhibitor
30008	Caspase-3 DEVD-R110 Fluorometric and Colorimetric Assay Kit
30009	Caspase-3 DEVD-R110 Fluorometric-HTS Assay Kit
00025	Staurosporine, 100 ug
10402-10408	NucView® Caspase-3 Substrates
30067	Dual Apoptosis Assay with NucView® 488 Caspase-3 Substrate & CF®594 Annexin V
30062	NucView® 488 & MitoView™ 633 Apoptosis Assay Kit
30072	NucView® 488 & RedDot™ 2 Apoptosis & Necrosis Kit
30065	Apoptosis & Necrosis Quantitation Kit Plus
30066	Apoptotic, Necrotic & Healthy Cells Quantitation Kit Plus
30060	CF®488A Annexin V and 7-AAD Apoptosis Kit
30061	CF®488A Annexin V and PI Apoptosis Kit
30001	JC-1 Mitochondrial Membrane Detection Kit
30063	CF®488A TUNEL Assay Apoptosis Detection Kit
30064	CF®594 TUNEL Assay Apoptosis Detection Kit
30074	CF®640R TUNEL Assay Apoptosis Detection Kit

Please visit our website at www.biotium.com to view our full selection of caspase-3 substrates and apoptosis assays. We offer NucView® Caspase-3 substrates for real-time apoptosis monitoring in live cells. Also view our full catalog of fluorescent probes including CF® Dye Annexin V conjugates, reactive dyes, and more kits for monitoring cell viability.

Materials from Biotium are sold for research use only, and are not intended for food, drug, household, or cosmetic use.