

## Z-VEID-FMK

Catalog Number: 13436, 13437  
Unit Size: 100 ug, 1 mg

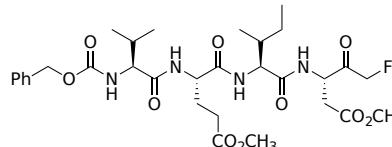
### Product Details

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Storage Conditions	Freeze (< -15 °C), Minimize light exposure
Expiration Date	24 months upon receiving

### Chemical Properties

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Appearance	Solid off-white
Molecular Weight	652.72
Soluble In	DMSO
Chemical Structure	 The chemical structure of Z-VEID-FMK is a peptidomimetic inhibitor. It features a central four-carbon tetrapeptide core with a carbonyl group at the C-terminus. The N-terminus is a Z-group (4-phenyl-2,4-dioxobutyl). The tetrapeptide sequence is -NH-CH(R1)-CH(R2)-CH(R3)-CH(R4)-NH2, where R1 is a 4-phenyl-2,4-dioxobutyl group, R2 is a 4-aminobutyryl group, R3 is a 4-aminobutyryl group, and R4 is a 4-fluorobutyryl group. The side chains are linked via amide bonds.

### Spectral Properties

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Excitation Wavelength	N/A
Emission Wavelength	N/A

### Applications

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Z-VEID-FMK is a cell permeable inhibitor of caspase 6. It irreversibly binds to active caspase 6. Caspases 3, 7 and 8 might also bind to Z-VEID-FMK, but much less efficiently than caspase 6. Apoptosis is an evolutionarily conserved form of cell suicide, which follows a specialized cellular process. The central component of the apoptosis process is a cascade of proteolytic enzymes called caspases. These enzymes participate in a series of reactions that are triggered in response to pro-apoptotic signals and result in cleavage of protein substrates, causing the disassembly of the cell. Caspases have been identified in organisms ranging from *C. elegans* to humans. The mammalian caspases play distinct roles in apoptosis and inflammation. In apoptosis, caspases are responsible for proteolytic cleavages that lead to cell disassembly (effector caspases) and are involved in upstream regulatory events (initiator caspases). An active caspase consists of two large (~20 kD) and two small (~10 kD) subunits to form two heterodimers which associate in a tetramer.