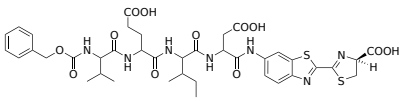
Z-VEID-aminoluciferin

Catalog Number: 13216
Unit Size: 1 mg

Product Details

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

Chemical Properties

Appearance	Solid
Molecular Weight	869.96
Soluble In	DMSO
Chemical Structure	

Spectral Properties

Excitation Wavelength	362 nm
Emission Wavelength	499 nm

Applications

Z-VEID-aminoluciferin is a luminogenic substrate that measures caspase-6 activity in apoptotic cells. Caspases, a family of aspartate-specific cysteine proteases, are key regulators of apoptosis, orchestrating the initiation and execution of cellular disassembly through the cleavage of specific cellular proteins. The tetrapeptide sequence VEID in this substrate is specific for protease cleavage by caspase-6. Following caspase-6 activation, the VEID peptide is cleaved just after the aspartic acid residue (D), releasing aminoluciferin, which serves as a luminescent substrate for the luciferase reaction. The intensity of the bioluminescent signal is directly proportional to the amount of caspase-6 activity in the sample, making it a valuable tool for researchers to study and quantify apoptotic processes, screen potential drug candidates, and investigate various cellular pathways related to cell death and survival.