

Ac-Pro-Ala-Leu-AMC

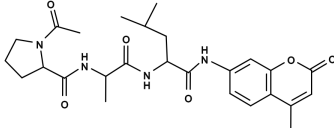
Catalog number: 13479

Unit size: 5 mg

Product Details

| | |
|--------------------|---|
| Storage Conditions | Freeze (<-15 °C), Minimize light exposure |
| Expiration Date | 12 months upon receiving |

Chemical Properties

| | |
|--------------------|---|
| Appearance | White solid |
| Molecular Weight | 498.57 |
| Soluble In | DMSO |
| Chemical Structure |  |

Spectral Properties

| | |
|-----------------------|--------|
| Excitation Wavelength | 341 nm |
| Emission Wavelength | 441 nm |

Applications

The weakly fluorescent AMC substrates generate the bright blue fluorescent AMC product that has Ex/Em = 351/430 nm, and can be easily detected with a DAPI filter set. This AMC substrate is used for monitoring the protease activities of the proteasome. The most common form of the proteasome is known as the 26S proteasome that contains one 20S core particle structure and two 19S regulatory caps. All 20S particles consist of four stacked heptameric ring structures that are themselves composed of two different types of subunits; alpha subunits are structural in nature, whereas beta subunits are predominantly catalytic. The outer two rings in the stack consist of seven alpha subunits each, which serve as docking domains for the regulatory particles and the alpha subunits N-termini form a gate that blocks unregulated access of substrates to the interior cavity. The inner two rings each consist of seven beta subunits and contain the protease active sites that perform the proteolysis reactions.