



MP Biomedicals, LLC

29525 Fountain Parkway
Solon, Ohio 44139

Telephone: 440/337-1200

Toll Free: 800/854-0530

Fax: 440/337-1180

mailto: biotech@mpbio.com

web: www.mpbio.com

ENZYME SYSTEMS PRODUCTS

a division of



Certificate of Analysis

Z-Val-Ala-Asp-FMK

Catalog #: FK109

Lot #: 3VM11

SEQUENCE: Z-Val-Ala-Asp-FMK
Z-VAD-FMK (non-omethylated)

The novel Z-VAD-FMK inhibitor **synthesized using proprietary technology** is cell permeable and irreversibly binds to activated Caspases to block apoptosis. Apoptosis is a physiological form of cell death, which plays important role in embryogenesis, cellular homeostasis, tissue atrophy, and removal damaged and mutated cells. Caspases, which act as molecular chainsaw are the central components of apoptosis response. Caspases are cysteine proteases that cleave after aspartate residue in their substrates. At least 7 of 14 known mammalian caspases have important role in apoptosis.

M.W.: 453

Formula: $C_{21}H_{28}N_3O_7F$

Storage: Keep Cool and Dry

Form: Off White Solid

ANALYTICAL DATA:

Mass Spectrometry: M+1=454.1,

Chromatography: TLC: EtOAc:9.5, AcOH:0.5, Rf:0.5, Single spot, purity: > 98 %

H NMR All functional groups are present

AAA Calculated Ala 1; Val 1.

Found Ala 0.96; Val 1.03.

SOLUBILITY: 20 mM DMSO (99.9%)

Stability: Solid: stable in desiccator >1 year. DMSO stock solution: stable at -20°C 6-8 months.

Christina Marotta

Approved by: Christina Marotta

Quality Control Director

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