



PRODUCT DATA SHEET

Product: Z-AEVD-FMK (Caspase-6, 8, 9 Inhibitor)

Cat. No: AB-022 (3 mg)

Chemical Name:

Z-Ala-Glu(Ome)-Val-Asp(Ome)-FMK

Molecular Weight: 610

Description:

Lyophilized solid. Peptide-fluoromethyl ketone inhibitor of caspases.

The CH₂F (fluoromethyl ketone) inhibitor has several advantages over other types of derivatives: Penetrates cell membranes, Not toxic to cells, Irreversible inhibition

Specificity:

Available data (reference 1) indicates that FMK inhibitors based on the sequence AEVD will inactivate caspases-6, 8, 9, and to a lesser extent caspases-1 and 3. Caspases-2, 4, 5, 7, and 10 will be little affected.

Solubility:

Soluble in both DMSO.

Protocol:

Dissolve the Caspase-13 Inhibitor in DMSO before use. It is important that dry, good quality DMSO be used.

For use on intact cells:

1. Prepare desired concentrated stock solutions as follows-

3 mg Z-AEVD-FMK in 246 μ l DMSO = 20 mM
in 492 μ l DMSO = 10 mM
in 984 μ l DMSO = 5 mM, etc.

2. Add 2 μ l of above stock solution to 1 ml culture medium containing cells such that the final DMSO concentration is 0.2%. Levels of DMSO above this may be toxic, thus masking the effect of the Caspase-13 protease inhibitor. Adding 2 μ l of a 10 mM stock solution to 1 ml of culture medium gives a final Z-AEVD-FMK concentration of 20 μ M. Typical final concentrations are 5 - 20 μ M.

For extended use *in vivo* and *in vitro*:

For experiments extending 12 to 48 hours, fresh inhibitor may have to be added (injected) due to inactivation of the inhibitor by endogenous cysteine proteases.

Storage and Stability:

Store inhibitor in a desiccator at room temperature or +4°C. For long-term, +4°C is recommended. If stored dessicated, Z-AEVD-FMK has a shelf life of at least 1 year. If stored at +4°C or -20°C, DMSO stock solutions have a shelf life of 1 year. Warm DMSO solutions to room temperature before opening to avoid contamination by water.

Limitations:

For research use only. Not for use in diagnostics or in humans.

Warranty:

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.