



PRODUCT DATA SHEET

Product: BOC-D-FMK

Cat. No.: AB-015 (5 mg)

Chemical Name:

BOC-Asp(OMe)-Fluoromethyl Ketone
[BOC-D(OMe)-FMK].

Molecular Weight:

263

Description:

Peptide-fluoromethyl ketone inhibitor of caspases. BOC-D-FMK is a pan-caspase inhibitor.

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

Specificity:

Binds irreversibly with and inhibits Caspase-1/ICE and Caspase-4.

Protocol:

Dissolve the BOC-D-FMK Inhibitor in DMSO before use.

For use on intact cells:

1. Prepare desired concentrated stock solutions as follows:
1 mg BOC-D(OMe)-FMK
in 190 μ L DMSO = 20mM
in 381 μ L DMSO = 10 mM
in 762 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 0.2% may cause some cellular toxicity, thus masking the effect of the BOC-D-FMK protease inhibitor. Adding 2 μ L of a 10 mM stock solution to 1 mL of culture medium gives a final BOC-D-FMK concentration of 20 mM. Typical final concentrations are 5-20 mM.

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.

IMPORTANT NOTE for *in vitro* use: Our peptide inhibitors are synthesized as methyl esters to enhance cell permeability. In intact cells, the methyl groups are removed by endogenous enzymes. For *in vitro* experiments with purified enzymes, however, the methyl groups must first be removed by treating the inhibitor with esterase. A procedure is available upon request.

Storage:

Solid product is stable for 1 year when stored in a desiccator at room temperature. For long-term, 4°C is recommended. DMSO stock solutions have a shelf life of 6-8 months when stored at -20°C.

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.