

Caspase Inhibitor

Caspase inhibitor Z-VAD-FMK

Code No.
4800-520

Quantity
20 μ L (100 mM)

BACKGROUND: Caspase is a member of the cysteine aspartic acid-specific protease family, which is activated by a variety of signals of death receptor ligation, DNA damages, serum starvation and stresses *etc.* Active caspase recognizes a lot of several molecules as substrates to cleave them, occurring to biological events corresponding to the apoptosis. For example, ICAD (inhibitor of caspase-activated deoxyribonuclease) is inactivated and CAD (caspase-activated deoxyribonuclease) is indirectly activated by caspase-3, and it is related to chromatin fragmentation for nucleosome units. Caspase recognizes several structural proteins as a substrate to cleave them, and the cleavage is associated with the unique apoptosis cell morphology of chromatin condensation, nucleus fragmentation and cytoplasmic integrity. Tri peptide sequence "VAD" is broadly recognized by caspases. Z-VAD-FMK is an irreversible and cell permeable powerful inhibitor for caspases.

STORAGE: This product must be stored at -20°C . Please see the label of this product for the expiration date.

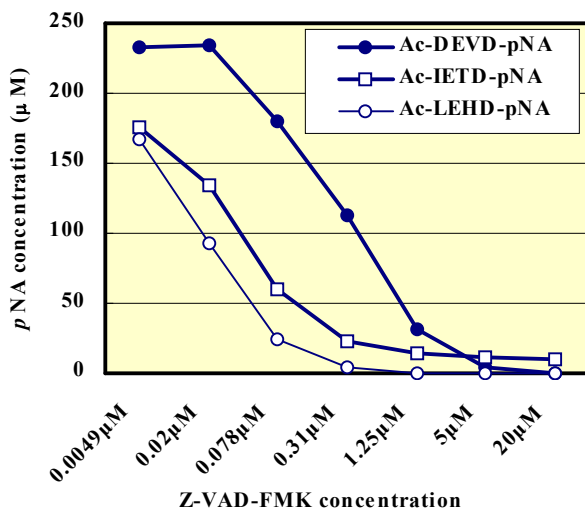
REFERENCE:

1) Slee, E. A., *et al.*, *Biochem J.*, **315**, 21-24 (1996)

RELATED PRODUCTS

Please visit our website at <https://ruo.mbl.co.jp/>.

FORMULATION: 100 mM Z-VAD-FMK in DMSO



Inhibition of caspase activity in cytosol of CH-11 treated Jurkat cells by Z-VAD-FMK. After Jurkat cells were treated with Fas monoclonal antibody CH-11 (100 ng/mL) for 4 hours, caspases activity was measured with Ac-DEVD-pNA, Ac-IETD-pNA or Ac-LEHD-pNA (each final concentration is 500 μM) in the presence of indicated concentration of Z-VAD-FMK (code no 4800-520).

250901-4