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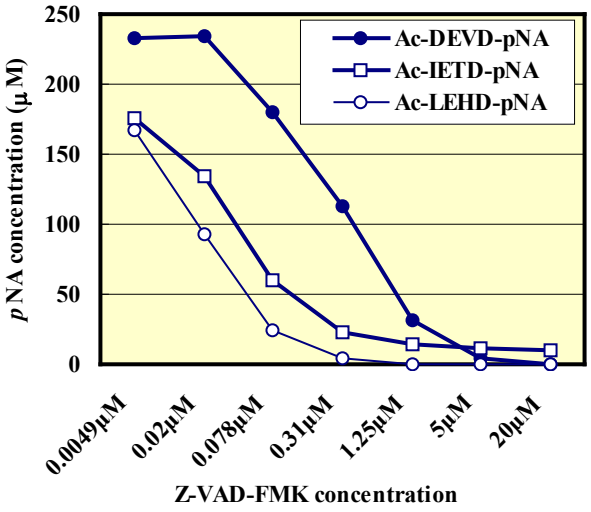
Caspase Inhibitor

Caspase inhibitor Z-VAD-FMK

Code No.	Quantity
4800-520	20 µL (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 deoxyrubonucrease) is inactivated and CAD (caspase-activated deoxyrubonucrease) 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.

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-*p*NA, Ac-IETD-*p*NA or Ac-LEHD-*p*NA (each final concentration is 500 µM) in the presence of indicated concentration of Z-VAD-FMK (code no 4800-520).

STORAGE: This product is 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)

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A JSR Life Sciences Company URL https://ruo.mbl.co.jp e-mail support@mbl.co.jp