

## Caspase Inhibitor

# Caspase-8 inhibitor Z-IETD-FMK

Code No.  
4805-510

Quantity  
20  $\mu$ L (100 mM)

**BACKGROUND:** Caspases are members of the cysteine aspartic acid-specific protease family, which is activated by a variety of signals, including death receptor ligation, DNA damages, serum starvation and stress. Caspases play a role in chromatin fragmentation into nucleosome units, and caspase activation is associated with the unique apoptosis cell morphology of chromatin condensation, nucleus fragmentation and cytoplasmic integrity. Active caspase recognizes several molecules as substrates during apoptosis. For example, ICAD (inhibitor of caspase-activated deoxyribonuclease) is inactivated while CAD (caspase-activated deoxyribonuclease) is indirectly activated by caspase-3. Caspases recognize specific peptide sequences containing an aspartic acid, and cleave these substrate proteins immediately following this aspartic residue. The tetra-peptide sequence "IETD" is preferentially recognized by caspase-8. Z-IETD-FMK is a powerful, irreversible and cell permeable inhibitor for caspase-8.

### REFERENCES:

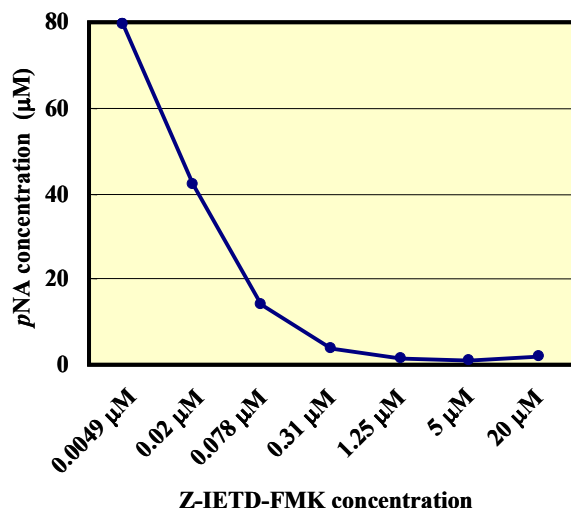
- 1) Vu, C.C., *et al.*, *J. Biol. Chem.* **276**, 37602-37611 (2001)
- 2) Hatano, E., *et al.*, *J. Biol. Chem.* **275**, 11814-11823 (2000)

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**FORMULATION:** 100 mM Z-IETD-FMK in DMSO

**STORAGE:** This product must be stored at  $-20^{\circ}\text{C}$ . Please see the label of this product for the expiration date.



**Inhibition of caspase-8 activity in cytosol of CH-11 treated Jurkat cells by Z-IETD-FMK.** After Jurkat cells were treated with 100 ng/mL of anti-Fas monoclonal antibody (clone CH-11, MBL code no. SY-001) for 4 hours, caspase-8 activity was measured with Ac-IETD-pNA (final concentration 500  $\mu\text{M}$ ) in the presence of indicated concentration of Z-IETD-FMK (MBL; code no 4805-510).

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