

Product Name: Z-LEVD-FMK Revision Date: 05/10/2025

### **Product Data Sheet**

### **Z-LEVD-FMK**

**Cat. No.:** A9046

CAS No.: 1135688-25-3
Formula: C31H45FN4O10

**M.Wt:** 652.72

Synonyms:

Target: Caspase-4

Pathway: Apoptosis/Caspase

Storage: Store at -20° C

# Solvent & Solubility

≥43.6 mg/mL in DMSO; ≥10.55 mg/mL in EtOH with ultrasonic; insoluble in H2O

In Vitro

Shortsummary

| Preparing Stock Solutions | Mass Solvent Concentration | 1mg       | 5mg       | 10mg       |
|---------------------------|----------------------------|-----------|-----------|------------|
|                           | 1 mM                       | 1.5321 mL | 7.6603 mL | 15.3205 mL |
|                           | 5 mM                       | 0.3064 mL | 1.5321 mL | 3.0641 mL  |
|                           | 10 mM                      | 0.1532 mL | 0.7660 mL | 1.5321 mL  |

Please refer to the solubility information to select the appropriate solvent.

## **Biological Activity**

Irreversible Caspase-4 inhibitor

| IC <sub>50</sub> & Target |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |
|---------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| In Vitro                  | Cell Viability Assay | And the second s |  |  |
|                           | Cell Line:           | hRPE cells                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |
|                           | Preparation method:  | hRPE cells were pretreated with caspase-4 inhibitor Z-LEVD-fmk (2 $$ $\mu$ M) for                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |
|                           |                      | 30 min and then co-incubated with IL-1 $\beta$ for additional 24 hr.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |
|                           | Reacting conditions: | 2 ng/mL, 30 min                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |
|                           | Applications:        | Caspase-4 inhibitor Z-LEVD-fmk reduced tunicamycin-induced hRPE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |

|         |                   | apoptotic cell death by 59%. |  |  |
|---------|-------------------|------------------------------|--|--|
| In Vivo | Animal experiment |                              |  |  |
|         | Applications:     |                              |  |  |

## **Product Citations**



See more customer validations on www.apexbt.com.

### References

1. Bian ZM, Elner SG, Elner VM. Dual involvement of caspase-4 in inflammatory and ER stress-induced apoptotic responses in human retinal pigment epithelial cells. Invest Ophthalmol Vis Sci. 2009 Dec;50(12):6006-14. doi: 10.1167/iovs.09-3628. Epub 2009 Jul 30. PMID: 19643964; PMCID: PMC3208232.

### Caution

#### FOR RESEARCH PURPOSES ONLY.

#### NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

### APExBIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77<mark>054.</mark> Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com