

# PRODUCT INFORMATION



## Ac-LEVD-AFC

Item No. 28809

**CAS Registry No.:** 1092077-23-0  
**Formal Name:** N-acetyl-L-leucyl-L- $\alpha$ -glutamyl-L-valyl-N-[2-oxo-4-(trifluoromethyl)-2H-1-benzopyran-7-yl]-L- $\alpha$ -asparagine

**Synonyms:** Ac-Leu-Glu-Val-Asp-AFC,  
Ac-Leu-Glu-Val-Asp-7-amino-4-trifluoromethylcoumarin

**MF:** C<sub>32</sub>H<sub>40</sub>F<sub>3</sub>N<sub>5</sub>O<sub>11</sub>

**FW:** 727.7

**Purity:**  $\geq 95\%$

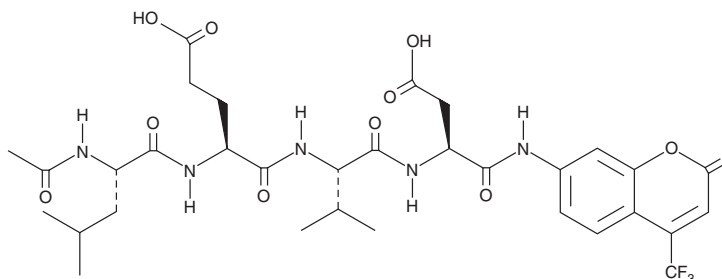
**UV/Vis.:**  $\lambda_{\text{max}}$ : 234, 340 nm

**Ex./Em. Max.:**  $\lambda_{\text{max}}$ : 400/505 nm, respectively

**Supplied as:** A crystalline solid

**Storage:** -20°C

**Stability:**  $\geq 4$  years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Ac-LEVD-AFC is supplied as a crystalline solid. A stock solution may be made by dissolving the Ac-LEVD-AFC in the solvent of choice, which should be purged with an inert gas. Ac-LEVD-AFC is soluble in the organic solvent DMSO at a concentration of approximately 10 mg/ml.

### Description

Ac-LEVD-AFC is a fluorogenic substrate for caspase-4.<sup>1,2</sup> Upon enzymatic cleavage by caspase-4, 7-amino-4-trifluoromethylcoumarin (AFC) is released and its fluorescence can be used to quantify caspase-4 activity. AFC displays excitation/emission maxima of 400/505 nm, respectively.

### References

1. Koehn, S., Trueck, M., Poerhlmann, T.G., *et al.* Assessment of caspase-4 released free AFC by RP-HPLC and fluorescence detection. *J. Chromatogr. B. Analyt. Technol. Biomed. Life Sci.* **874(1-2)**, 111-114 (2008).
2. Pallett, M.A., Crepin, V.F., Serafini, N., *et al.* Bacterial virulence factor inhibits caspase-4/11 activation in intestinal epithelial cells. *Mucosal Immunol.* **10(3)**, 602-612 (2017).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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