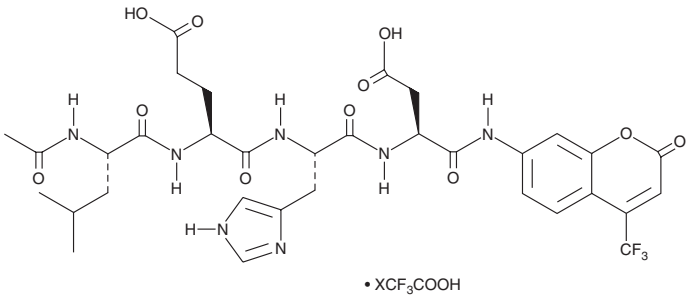
PRODUCT INFORMATION

Ac-LEHD-AFC (trifluoroacetate salt)

Item No. 17051

Formal Name:	N-acetyl-L-leucyl-L-α-glutamyl-L-histidyl-N-[2-oxo-4-(trifluoromethyl)-2H-1-benzopyran-7-yl]-L-α-asparagine, trifluoroacetate salt
Synonyms:	N-Acetyl-Leu-Glu-His-Asp-7-amino-4-Trifluoromethylcoumarin, Caspase-9 substrate (Fluorogenic)
MF:	$C_{33}H_{38}F_3N_7O_{11}$ • XCF_3COOH
FW:	765.7
Purity:	≥95%
UV/Vis.:	λ_{max}: 211, 340 nm
Ex./Em. Max:	400/505 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



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

Laboratory Procedures

Ac-LEHD-AFC (trifluoroacetate salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the Ac-LEHD-AFC (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Ac-LEHD-AFC (trifluoroacetate salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of Ac-LEHD-AFC (trifluoroacetate salt) in ethanol and DMSO is approximately 2 mg/ml and approximately 5 mg/ml in DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of Ac-LEHD-AFC (trifluoroacetate salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of Ac-LEHD-AFC (trifluoroacetate salt) in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Ac-LEHD-AFC is a fluorogenic substrate that can be cleaved by caspase-4, -5, and -9.[1] Caspase activity can be quantified by fluorescent detection of free AFC (also known as 7-amino-4-trifluoromethylcoumarin), which is excited at 400 nm and emits at 505 nm.

Reference

1. Thornberry, N.A., Rano, T.A., Peterson, E.P., et al. A combinatorial approach defines specificities of members of the caspase family and granzyme B. Functional relationships established for key mediators of apoptosis. *J. Biol. Chem.* **272(29)**, 17907-17911 (1997).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM