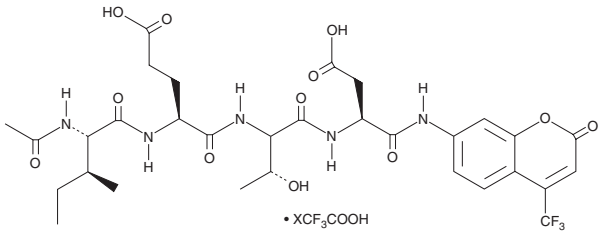
PRODUCT INFORMATION

Ac-IETD-AFC (trifluoroacetate salt)

Item No. 17480

Formal Name:	N-acetyl-L-isoleucyl-L-α-glutamyl-L-threonyl-N-[2-oxo-4-(trifluoromethyl)-2H-1-benzopyran-7-yl]-L-α-asparagine, trifluoroacetate salt
Synonym:	N-Acetyl-Ile-Glu-Thr-Asp-7-amino-4-Trifluoromethylcoumarin
MF:	$C_{31}H_{38}F_3N_5O_{12} \bullet XCF_3COOH$
FW:	729.7
Purity:	≥95%
UV/Vis.:	λ_{max}: 232, 340 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-IETD-AFC (trifluoroacetate salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the Ac-IETD-AFC (trifluoroacetate salt) in the solvent of choice. Ac-IETD-AFC (trifluoroacetate salt) is soluble in organic solvents such as DMSO, which should be purged with an inert gas, at a concentration of approximately 10 mg/ml.

Ac-IETD-AFC (trifluoroacetate salt) is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Ac-IETD-AFC is a fluorogenic substrate that can be cleaved by caspase-8 and related enzymes that recognize the amino acid sequence IETD, including caspase-3 processing enzyme, caspase-10, and granzyme B.[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. Reszka, P., Schulz, R., Methling, K., *et al*. Synthesis, enzymatic evaluation, and docking studies of fluorogenic caspase 8 tetrapeptide substrates. *ChemMedChem* **5**, 103-117 (2010).

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