

Product Data Sheet

Product Name: Suc-Leu-Leu-Val-Tyr-AMC (trifluoroacetate salt)

Cat. No.: GC52447

Chemical Properties

Cas. No.

SMILES CC(C1=CC=C(C=C1O2)NC([C@H](CC3=CC=C(C=C3)O)NC([C@@H](NC([C@@H](NC([C@@H](NC(CCC(O)=O)=O)CC(C)C)=O)CC(C)C)=O)C(C)C)=O)=O)=CC2=O.FC(F)(F)C(O)=O

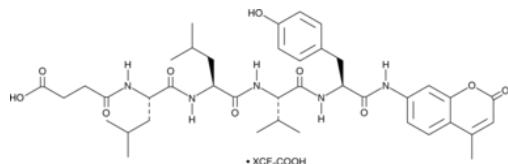
Formula $C_{40}H_{53}N_5O_{10} \cdot XCF_3COOH$ M.Wt 763.9

Solubility DMF: 2 mg/ml, DMSO: 3 mg/ml, Ethanol: insol, PBS (pH 7.2): insol Storage $-20^{\circ}C$

General tips For obtaining a higher solubility, please warm the tube at $37^{\circ}C$ and shake it in the ultrasonic bath for a while. Stock solution can be stored below $-20^{\circ}C$ for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

Suc-Leu-Leu-Val-Tyr-AMC is a fluorogenic substrate for the 20S proteasome, other chymotrypsin-like proteases, and calpains.^{1,2} Upon enzymatic cleavage, 7-amino-4-methylcoumarin (AMC) is released and its fluorescence can be used to quantify protease activity. AMC displays excitation/emission maxima of 340-360/440-460 nm, respectively.

1. Geier, E., Pfeifer, G., Wilm, M., et al. A giant protease with potential to substitute for some functions of the proteasome. *Science* 283(5404):978-981 (1999)
2. Sasaki, T., Kikuchi, T., Yumoto, N., et al. Comparative specificity and kinetic studies on porcine calpain I and calpain II with naturally occurring peptides and synthetic fluorogenic substrates. *J. Biol. Chem.* 259(20):12489-12494 (1984)

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA