Ac-WEHD-AFC TFA

Cat. No.: HY-P2617A

Molecular Formula: $C_{40}H_{38}F_6N_8O_{13}$

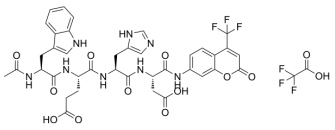
Molecular Weight: 952.77

Sequence Shortening: Ac-WEHD-{AFC}

Target: Caspase

Pathway: Apoptosis

Storage: Sealed storage, away from moisture and light, under nitrogen
Powder -80°C 2 years
-20°C 1 year
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light, under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (104.96 mM; Need ultrasonic)
H_2O : 50 mg/mL (52.48 mM; Need ultrasonic)

Preparing Stock Solutions

Concentration \ Solvent \ Mass	1 mg	5 mg	10 mg
1 mM	1.0496 mL	5.2479 mL	10.4957 mL
5 mM	0.2099 mL	1.0496 mL	2.0991 mL
10 mM	0.1050 mL	0.5248 mL	1.0496 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (2.62 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (2.62 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (2.62 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Ac-WEHD-AFC TFA is a fluorogenic caspase-1 substrate. Ac-WEHD-AFC TFA can measure caspase-1 fluorogenic activity and can be used for the research of tumor and inflammation[1].

IC_{50} & Target

Caspase-1

In Vitro	Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs). Caspase-1 Fluorogenic Activity Assay[1]: 1. Incubate the cells according to your normal protocol. 2. Cells are transiently transfected with caspase-1 in combination with pcDNA3.1, Myc-cIAP2, Myc-cIAP1, or Myc-XIAP and collected 24 hr later. 3. Cells were lysed in CHEGG buffer before sonicating for 15 s at 60% amplitude (for cleavage assays). 4. Lysates were incubated with 10 mM of the fluorogenic caspase-1 substrate Ac-WEHD-AFC TFA. 5. The release of free AFC was monitored continuously for 1 hr (excitation 380 nm, emission 460 nm) in 1 min intervals and expressed as arbitrary fluorescence units per minute. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Katherine Labbé, et al. Cellular inhibitors of apoptosis proteins cIAP1 and cIAP2 are required for efficient caspase-1 activation by the inflammasome. Immunity. 2011 Dec 23;35(6):897-907.

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