Ac-WEHD-AFC TFA

Cat. No.: HY-P2617A Molecular Formula: $C_{40}H_{38}F_{6}N_{8}O_{13}$ Molecular Weight: 952.77

Sequence Shortening: Ac-WEHD-{AFC}

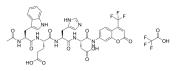
Target: Caspase Pathway: **Apoptosis**

Sealed storage, away from moisture and light, under nitrogen Storage:

> 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)



Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (104.96 mM; Need ultrasonic) H₂O: 50 mg/mL (52.48 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	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 $inflammation^{[1]}$.

IC₅₀ & 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.

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

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