# **Product** Data Sheet

## Ac-YVAD-pNA

Cat. No.: HY-P2091 CAS No.: 149231-66-3 Molecular Formula:  $C_{29}H_{36}N_6O_{10}$ Molecular Weight: 628.63

Ac-Tyr-Val-Ala-Asp-{pNA} Sequence:

Sequence Shortening: Ac-YVAD-{pNA}

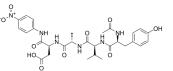
Target: Caspase Pathway: **Apoptosis** 

Sealed storage, away from moisture and light Storage:

> Powder -80°C 2 years -20°C 1 year

 $^{\star}$  In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture

and light)



#### **SOLVENT & SOLUBILITY**

In Vitro DMSO: ≥ 250 mg/mL (397.69 mM)

\* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.5908 mL	7.9538 mL	15.9076 mL
	5 mM	0.3182 mL	1.5908 mL	3.1815 mL
	10 mM	0.1591 mL	0.7954 mL	1.5908 mL

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

#### **BIOLOGICAL ACTIVITY**

Description	Ac-YVAD-pNA is a specific Caspase-1 substrate. Ac-YVAD-pNA can be used to detect Caspase-1 activity. Caspase-1 is a key mediator of inflammatory processes $^{[1][2]}$ .

### IC<sub>50</sub> & Target

Caspase-1

#### **REFERENCES**

[1]. Pereira NA, et al. Some commonly used caspase substrates and inhibitors lack the specificity required to monitor individual caspase activity. Biochem Biophys Res Commun. 2008 Dec 19;377(3):873-7.

[2]. Xin W, Wang Q, et al. A new 247.	mechanism of inhibition of IL	-1β secretion by celastrol through	the NLRP3 inflammasome pathway. Eur J Phar	macol. 2017 Nov 5;814:240-
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	Tel: 609-228-6898 Address: 1 [	Fax: 609-228-5909 Deer Park Dr, Suite Q, Monmou	E-mail: tech@MedChemExpress.com th Junction, NJ 08852, USA	
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