

## Dnp-PLGLWA-DArg-NH2 TFA

Cat. No.:	HY-P3484
Molecular Formula:	C <sub>47</sub> H <sub>65</sub> F <sub>3</sub> N <sub>14</sub> O <sub>13</sub>
Molecular Weight:	1091.1
Target:	MMP
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

### BIOLOGICAL ACTIVITY

Description	Dnp-PLGLWA-DArg-NH2 TFA is a fluorogenic substrate for MMP-1 and MMP-9. Dnp-PLGLWA-DArg-NH2 TFA can be used to quantify the activity of MMPs (Ex=280 nm, Em=360 nm) <sup>[1][2]</sup> .	
IC <sub>50</sub> & Target	MMP-1	MMP-9
In Vitro	Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs) <sup>[2]</sup> . 1. Enzyme activity assays are performed in 50 mmol/l Tris-HCl buffer, pH 7.5, 0.15 mol/l NaCl, 10 mmol/l CaCl <sub>2</sub> , 0.02% TNC buffer containing 0.05% Brij 35 and 50 μM ZnSO <sub>4</sub> . 2. Dnp-PLGLWA-DArg-NH2 TFA. Each fraction is incubated with 1 μM substrate at 37°C for 20 h. 3. Stop the reaction by the addition of 3% acetic acid. 4. Measure the fluorescence using wavelengths of 280 nm (excitation) and 360 nm (emission) with a fluorescence reader. MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

### REFERENCES

[1]. G M McGeehan, et al. Characterization of the peptide substrate specificities of interstitial collagenase and 92-kDa gelatinase. Implications for substrate optimization. J Biol Chem. 1994 Dec 30;269(52):32814-20.

[2]. Ken-ichi Shimokawa Ki, et al. Matrix metalloproteinase (MMP)-2 and MMP-9 activities in human seminal plasma. Mol Hum Reprod. 2002 Jan;8(1):32-6.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA