

# **Product** Data Sheet

## **RGD Trifluoroacetate**

Cat. No.: HY-P0278A CAS No.: 2378808-45-6 Molecular Formula:  $C_{14}H_{23}F_3N_6O_8$  Molecular Weight: 460.36

Sequence: Arg-Gly-Asp

Sequence Shortening: RGD

Target: Integrin

Pathway: Cytoskeleton

**Storage:** Sealed storage, away from moisture

Powder -80°C 2 years

-20°C 1 year

#### **SOLVENT & SOLUBILITY**

In Vitro  $H_2O : \ge 60 \text{ mg/mL } (130.33 \text{ mM})$ 

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

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.1722 mL	10.8611 mL	21.7221 mL
	5 mM	0.4344 mL	2.1722 mL	4.3444 mL
	10 mM	0.2172 mL	1.0861 mL	2.1722 mL

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

In Vivo 1. Add each solvent one by one: PBS

Solubility: 100 mg/mL (217.22 mM); Clear solution; Need ultrasonic

#### **BIOLOGICAL ACTIVITY**

**Description**RGD Trifluoroacetate is a tripeptide that effectively triggers cell adhesion, addresses certain cell lines and elicits specific cell responses; RGD Trifluoroacetate binds to integrins.

IC<sub>50</sub> & Target Integrin<sup>[1]</sup>

In Vitro RGD Trifluoroacetate is the most effective and most often employed peptide sequence for stimulated cell adhesion on

synthetic surfaces. There are 24 integrins binding to ECM molecules in a RGD dependent manner:  $\alpha 3\beta 1$ ,  $\alpha 5\beta 1$ ,  $\alpha 8\beta 1$ ,  $\alpha IIb\beta 3$ ,  $\alpha \nu \beta 1$ ,  $\alpha \nu \beta 3$ ,  $\alpha \nu \beta 5$ ,  $\alpha \nu \beta 6$ ,  $\alpha \nu \beta 8$ , and to some extent  $\alpha 2\beta 1$  and  $\alpha 4\beta 1^{[1]}$ .

 $\label{eq:mce} \mbox{MCE has not independently confirmed the accuracy of these methods. They are for reference only.}$ 

<sup>\*</sup> In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

### **CUSTOMER VALIDATION**

- Chem Eng J. 5 February 2022, 135088.
- Cancer Sci. 2020 May 24;111(8):2803-2813.
- Colloid Polym Sci. 2023 Feb 27.
- Mater Sci Forum. 2019, 955: 68-73.

See more customer validations on www.MedChemExpress.com

#### **REFERENCES**

[1]. Hersel U, et al. RGD modified polymers: biomaterials for stimulated cell adhesion and beyond. Biomaterials. 2003 Nov;24(24):4385-415.

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

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