

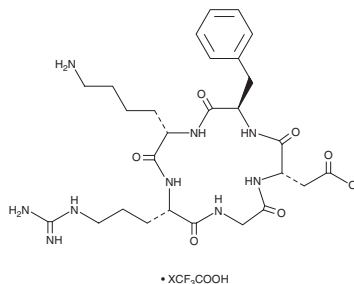
# PRODUCT INFORMATION



## Cyclo(RGDfK) (trifluoroacetate salt)

Item No. 44991

**Formal Name:** cyclo(L-arginylglycyl-L- $\alpha$ -aspartyl-D-phenylalanyl-L-lysyl), 2,2,2-trifluoroacetate  
**Synonym:** Cyclo(Arg-Gly-Asp-D-Phe-Lys)  
**MF:** C<sub>27</sub>H<sub>41</sub>N<sub>9</sub>O<sub>7</sub> • XCF<sub>3</sub>COOH  
**FW:** 603.7  
**Purity:**  $\geq$ 98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Cyclo(RGDfK) (trifluoroacetate salt) is supplied as a solid. Aqueous solutions of Cyclo(RGDfK) (trifluoroacetate salt) can be prepared by directly dissolving the solid in aqueous buffers. Cyclo(RGDfK) (trifluoroacetate salt) is soluble ( $\geq$ 10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

### Description

Cyclo(RGDfK) is a synthetic lipopeptide inhibitor of  $\alpha$ v $\beta$ 3 integrin (IC<sub>50</sub> = 1.33 nM).<sup>1</sup> Osteoblast cultures, which express  $\alpha$ v $\beta$ 5 and  $\alpha$ v $\beta$ 3 integrins, but not M21L cells that do not express these integrins, bind to cyclo(RGDfK)-coated surfaces. Cyclo(RGDfK) is taken up into tumors *in vivo* and *in vitro* and it has been polymerized or conjugated to various fluorophores, radiolabels, and peptide sequences for use in fluorescent and PET imaging to study tumor cell adhesion.<sup>1-3</sup>

### References

1. Šimeček, J., Notni, J., Kapp, T.G., *et al.* Benefits of NOPO as chelator in gallium-68 peptides, exemplified by preclinical characterization of <sup>68</sup>Ga-NOPO-c(RGDfK). *Mol. Pharm.* **11(5)**, 1687-1695 (2014).
2. Dijkgraaf, I., Beer, A.J., and Wester, H.-J. Application of RGD-containing peptides as imaging probes for alphavbeta3 expression. *Front. Biosci. (Landmark Ed.)* **14(3)**, 887-899 (2009).
3. Janssen, M., Oyen, W.J.G., Massuger, L.F.A.G., *et al.* Comparison of a monomeric and dimeric radiolabeled RGD-peptide for tumor targeting. *Cancer Biother. Radiopharm.* **17(6)**, 641-646 (2002).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/04/2025

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM