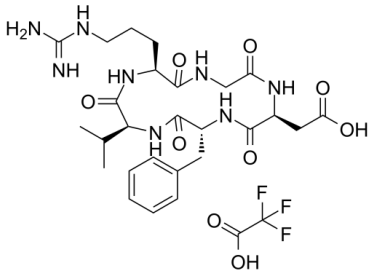
Data Sheet

Product Name:	Cyclo(Arg-Gly-Asp-D-Phe-Val) (TFA)
Cat. No.:	CS-0062738
CAS No.:	199807-33-5
Molecular Formula:	C28H39F3N8O9
Molecular Weight:	688.65
Target:	Integrin
Pathway:	Cytoskeleton
Solubility:	10 mM in DMSO



BIOLOGICAL ACTIVITY:

Cyclo(Arg-Gly-Asp-D-Phe-Val) (TFA) is an inhibitor of **integrin αvβ3**, with antitumor activity. IC50 & Target: αvβ3[1] **In Vitro:** Cyclo(Arg-Gly-Asp-D-Phe-Val) (TFA) is an inhibitor of integrin αvβ3. Cyclo(Arg-Gly-Asp-D-Phe-Val) [c(RGDfV); 35 nM] induces disruption of leukemia cell migration and adhesion to leukemia osteoblasts in the 3D and 2D culture systems, affects the leukemia cell cycle and induces apoptosis in leukemia cells[1].

PROTOCOL (Extracted from published papers and Only for reference)

Cell Assay: [1]The osteoblasts are cultured in RPMI 1640 medium for 2 days. MV4-11 cells (1.8×10^5 cells/mL in the 2D culture system and 1×10^6 cells/mL in the 3D culture system) are co-cultured with leukemia osteoblasts in RPMI 1640 medium. The experiments used two groups: The experimental group received c(RGDfV) (35 nmol/mL) and the control group received an equal volume of phosphate-buffered saline (PBS) only[1].

References:

[1]. Shen ZH, et al. Targeting of the leukemia microenvironment by c(RGDfV) overcomes the resistance to chemotherapy in acute myeloid leukemia in biomimetic polystyrene scaffolds. Oncol Lett. 2016 Nov;12(5):3278-3284.

CAIndexNames:

Cyclo(L-arginylglycyl-L-α-aspartyl-D-phenylalanyl-L-valyl),2,2,2-trifluoroacetate (1:1)

SMILES:

O=C([C@@H](NC(CNC([C@H](CCCNC(N)=N)NC([C@H](C(C)C)NC1=O)=O)=O)=O)CC(O)=O)N[C@@H]1CC2=CC=CC=C2.FC(C(O)=O)(F)F

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

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