

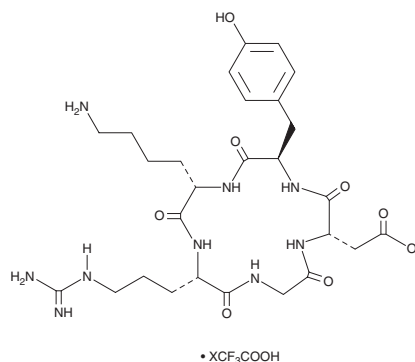
PRODUCT INFORMATION



Cyclo(RGDyK) (trifluoroacetate salt)

Item No. 35173

Formal Name: cyclo(L-arginylglycyl-L- α -aspartyl-D-tyrosyl-L-lysyl), trifluoroacetate salt
Synonyms: c(RGDyK), cyclic-L-Arg-L-Gly-L-Asp-D-Tyr-L-Lys
MF: C₂₇H₄₁N₉O₈ • XCF₃COOH
FW: 619.7
Purity: \geq 98%
UV/Vis.: λ_{max} : 225 nm
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(RGDyK) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the cyclo(RGDyK) (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Cyclo(RGDyK) (trifluoroacetate salt) is soluble in the organic solvent ethanol. It is also soluble in water. We do not recommend storing the aqueous solution for more than one day.

Description

Cyclo(RGDyK) is a cyclic peptide ligand of α V β 3 integrin (IC_{50} = 37.5 nM) that contains the α V β 3 integrin-binding sequence arginine-glycine-aspartate (RGD).¹ It has been conjugated to radiolabels or fluorescent probes for the visualization of α V β 3-mediated neoangiogenesis or optical imaging of α V β 3-expressing tumors in live mice.^{1,2} Cyclo(RGDyK) has also been conjugated to the DNA topoisomerase I inhibitor SN38 (Item No. 15632) and an SN38-releasing trigger moiety to form a prodrug that targets cells overexpressing α V β 3 integrin and induces cytotoxicity in KB human cervical carcinoma cells.³

References

1. Chen, X., Conti, P.S., and Moats, R.A. *In vivo* near-infrared fluorescence imaging of integrin α V β 3 in brain tumor xenografts. *Cancer Res.* **64**(21), 8009-8014 (2004).
2. van Hagen, P.M., Breeman, W.A., Bernard, H.F., *et al.* Evaluation of a radiolabelled cyclic DTPA-RGD analogue for tumour imaging and radionuclide therapy. *Int. J. Cancer* **90**(4), 186-198 (2000).
3. Huang, B., Desai, A., Tang, S., *et al.* The synthesis of a c(RGDyK) targeted SN38 prodrug with an indolequinone structure for bioreductive drug release. *Org. Lett.* **12**(7), 1384-1387 (2010).

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.

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