

PRODUCT INFORMATION



Gly-Arg-Gly-Asp-Ser-Pro (trifluoroacetate salt)

Item No. 44476

Formal Name: glycyl-L-arginylglycyl-L- α -aspartyl-L-seryl-L-proline, trifluoroacetate salt

Peptide Sequence: GRGDSP-OH

MF: C₂₂H₃₇N₉O₁₀ • XCF₃COOH

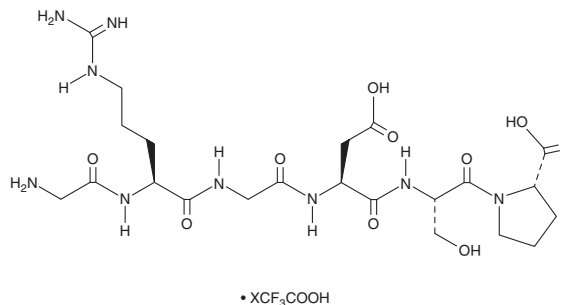
FW: 587.6

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

Gly-Arg-Gly-Asp-Ser-Pro (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the Gly-Arg-Gly-Asp-Ser-Pro (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Gly-Arg-Gly-Asp-Ser-Pro (trifluoroacetate salt) is sparingly soluble (1-10 mg/ml) in DMSO.

Description

Gly-Arg-Gly-Asp-Ser-Pro (GRGDSP) is an RGD-containing integrin-blocking peptide.¹ It inhibits integrin α 5 β 1 and integrin α V β 3 (IC₅₀s = 200 and 20 nM, respectively). GRGDSP (1 nM) induces chemotaxis of primary human foreskin fibroblasts (HFFs).² It reduces angiogenesis induced by basic FGF (bFGF) in a chick chorioallantoic membrane (CAM) assay when used at a concentration of 10 μ g/egg.³ GRGDSP (10 μ g/animal) decreases tumor volume and increases survival in a collagen-induced paclitaxel-resistant MCF-7 breast cancer mouse xenograft model.⁴

References

1. Koivunen, E., Gay, D.A., and Ruoslahti, E. Selection of peptides binding to the α 5 β 1 integrin from phage display library. *J. Biol. Chem.* **68(27)**, 20205-20210 (1993).
2. Knapp, D.M., Helou, E.F., and Tranuillo, R.T. A fibrin or collagen gel assay for tissue cell chemotaxis: assessment of fibroblast chemotaxis to GRGDSP. *Exp. Cell Res.* **47(2)**, 543-553 (1999).
3. Kim, E.Y., Bang, J.Y., Chang, S.I., *et al.* A novel integrin α 5 β 1 antagonistic peptide, A5-1, screened by Protein Chip system as a potent angiogenesis inhibitor. *Biochem. Biophys. Res. Commun.* **377(4)**, 1288-1293 (2008).
4. Li, X., Li, Q., Yu, X., *et al.* Reverse of microtubule-directed chemotherapeutic drugs resistance induced by cancer-associated fibroblasts in breast cancer. *Oncotargets Ther.* **12**, 7963-7973 (2019).

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, 12/09/2025

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