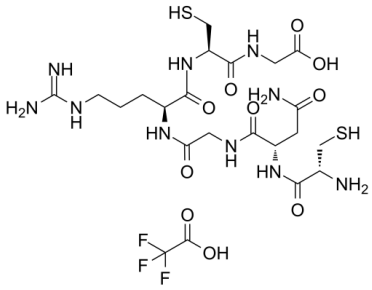
Data Sheet

Product Name:	NGR peptide Trifluoroacetate
Cat. No.:	CS-7687
Molecular Formula:	C22H37F3N10O10S2
Molecular Weight:	722.72
Target:	Aminopeptidase
Pathway:	Metabolic Enzyme/Protease
Solubility:	H2O : ≥ 100 mg/mL (138.37 mM)



BIOLOGICAL ACTIVITY:

NGR peptide Trifluoroacetate containing the asparagine-glycine-arginine (NGR) motif is recognized by **CD13/aminopeptidase N** (**APN**) **receptor** isoforms that are selectively overexpressed in tumor neovasculature. IC50 & Target: CD13/aminopeptidase N (APN) receptor[1] **In Vitro:** NGR peptide can selectively bind to APN/CD13 either immune-captured or expressed on the surface of cells, the receptor of the tumor-homing NGR peptide was suspected to be APN/CD13. The NGR peptide is reported to have the greatest tumor selectivity. An anti-cancer drug Doxorubicin (DOX) coupled to an NGR peptide displays enhanced anti-tumor effects with even lower toxicity than the free drug itself[2]. **In Vivo:** NGR peptide imaging in vivo not only provides more insight into NGR's targeting process, including bio-distribution and pharmacokinetics, but also reveals angiogenic activities related to tumor progression and malignancy[2].

References:

[1]. Enyedi KN, et al. NGR-peptide-drug conjugates with dual targeting properties. NGR-peptide-drug conjugates with dual targeting properties.

[2]. Wang RE, et al. Development of NGR peptide-based agents for tumor imaging. Am J Nucl Med Mol Imaging. 2011;1(1):36-46.

CAIndexNames:

Glycine, L-cysteinyl-L-asparaginylglycyl-L-arginyl-L-cysteinyl-, 2,2,2-trifluoroacetic acid

SMILES:

O=C(N[C@@H](CS)C(NCC(O)=O)=O)[C@H](CCCNC(N)=N)NC(CNC([C@H](CC(N)=O)NC([C@@H](N)CS)=O)=O)=O.FC(C(O)=O)(F)F

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

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