

Product Information

Serine protease inhibitor Aprotinin, Purity ≥98%

Cat. No.: X24-07-ZQ789

Size: 25 mg; 50 mg; 100 mg

CAS Number: 9087-70-1

Compound CID: 22833874

Synonym: 9087-70-1; Serine protease inhibitor

This product is for research use only and is not intended for diagnostic use.

Product Information

Description	Aprotinin, soluble in DMSO and water, is a molecule that plays a crucial role in regulating various physiological processes by inhibiting the activity of serine proteases. It targets chymotrypsin, kallikrein, thrombin, trypsin, and trypsinogen.
Molecular Weight	6511.51
Molecular Formula	C ₂₈₄ H ₄₃ N ₈₄ O ₇₉ S ₇
Targets	Chymotrypsin: 9.5 nM (Ki); kallikrein: 0.8 nM (Ki); Thrombin; Trypsin: 0.06 pM (Ki); trypsinogen: 2 μM (Ki)
IUPAC Name	4-[[1-[[[29a,62a,69,84-Tetrakis(4-aminobutyl)-35a,75,78-tris(2-amino-2-oxoethyl)-14a-(3-amino-3-oxo propyl)-8a,41a,72-tribenzyl-50a,53a-di(butan-2-yl)-47a,48,56a,81,90-pentakis(3-carbamimidamidopropyl)-31,60-bis(2-carboxyethyl)-42-[[2-[[2-(1-carboxyethylamino)-2-oxoethyl]amino]-2-oxoethyl]carbamoyl]-57-(carboxymethyl)-11a,13,45-tris(1-hydroxyethyl)-66-(hydroxymethyl)-2a,16,38a,44a-tetrakis(4-hydroxyphenyl)methyl]-26a,32a,59a,63,87-pentamethyl-20a,34-bis(2-methylpropyl)-51-(2-methylsulfanylethyl)-1a,3,4a,7a,9,10a,12,13a,15,16a,18,19a,22a,24,25a,28a,30,31a,33,34a,36,37a,40a,43a,44,46a,47,49a,50,52a,53,55a,56,58a,59,61a,62,64a,65,68,71,74,77,80,83,86,89,92,95,98-pentacontaoxo-5a-propan-2-yl-39,40,66a,67a,70a,71a-hexathia-a,2,3a,6a,8,9a,11,12a,14,15a,17,18a,21a,23,24a,27a,29,30a,32,33a,35,36a,39a,42a,43,45a,46,48a,49,51a,52,54a,55,57a,58,60a,61,63a,64,67,70,73,76,79,82,85,88,91,94,97-pentacontazahexacyclo[91.71.4.454,117.04,8.019,23.025,29]doheptacontahectan-37-yl]amino]-1-oxo-3-phenylpropan-2-yl]amino]-3-[[1-(2-amino-5-carbamimidamidopentanoyl)pyrrolidine-2-carbonyl]amino]-4-oxobutanoic acid
InChI	InChI=1S/C284H432N84O79S7/c1-21-144(9)222-271(439)337-174(68-46-105-309-282(300)301)239(407)340-187(120-160-77-85-164(374)86-78-160)251(419)341-185(116-156-55-29-24-30-56-156)250(418)342-188(121-161-79-87-165(375)88-80-161)252(420)346-191(123-208(291)378)246(414)322-149(14)230(398)326-168(62-35-39-98-285)234(402)319-146(11)227(395)314-132-215(385)324-181(113-141(3)4)247(415)354-199-137-452-453-138-200-263(431)336-179(97-112-448-20)242(410)331-176(70-48-107-311-284(304)305)244(412)363-226(154(19)372)274(442)358-197(233(401)316-



Identity	Confirmed by NMR/HPLC/MS.
Stability	The product is stable for three years when stored at the recommended temperature in lyophilized powder.
Quality Level	Research grade
Applications	Aprotinin is used to study its inhibitory effects on serine proteases, which are important in coagulation and inflammatory pathways.
Storage	Store at -20°C, and keep desiccated.