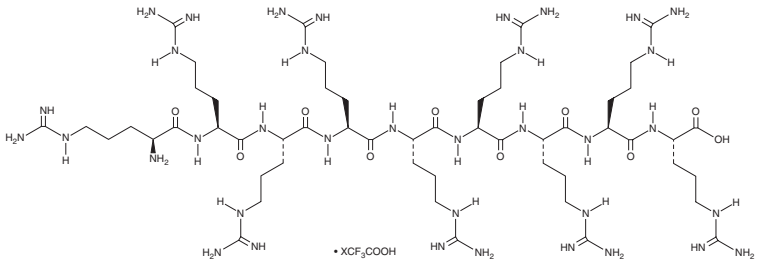
PRODUCT INFORMATION

$(Arg)_9$ (trifluoroacetate salt)

Item No. 36714

CAS Registry No.:	1228255-42-2
Formal Name:	L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-arginyl-L-arginine, 2,2,2-trifluoroacetate
Synonyms:	Nona-Arginine, Poly-Arginine-9, RRRRRRRRR
MF:	$C_{54}H_{110}N_{36}O_{10} \bullet XCF_3COOH$
FW:	1,423.7
Purity:	≥95%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

$(Arg)_9$ (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the $(Arg)_9$ (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. $(Arg)_9$ (trifluoroacetate salt) is slightly soluble in DMSO.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of $(Arg)_9$ (trifluoroacetate salt) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of $(Arg)_9$ (trifluoroacetate salt) in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

$(Arg)_9$ is a cationic cell-penetrating peptide.[1,2] It has been used to deliver various cargo to cells, including fluorescent proteins and plasmids. $(Arg)_9$ (5 and 10 µM) also protects primary rat cortical neurons from glutamate-induced excitotoxicity.[3]

References

1. Chang, M., Chou, J.-C., and Lee, H.-J. Cellular internalization of fluorescent proteins via arginine-rich intracellular delivery peptide in plant cells. *Plant Cell Physiol.* **46(3)**, 482-488 (2005).
2. Lee, C.-Y., Li, J.-F., Liou, J.-S., *et al.* A gene delivery system for human cells mediated by both a cell-penetrating peptide and a *piggyBac* transposase. *Biomaterials* **32(26)**, 6264-6276 (2011).
3. Meloni, B.P., Brookes, L.M., Clark, V.W., *et al.* Poly-arginine and arginine-rich peptides are neuroprotective in stroke models. *J. Cereb. Blood Flow Metab.* **35(6)**, 993-1004 (2015).

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