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## A novel secreted death peptide from Cobra Venom Phospholipase A2 treated human lymphocytes

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Phospholipase A2 (PLA2) is a universal toxic enzyme present in all the snake venoms causing painful inflammation. PLA2 forms 60% of the proteins of the venom, hence, preventing PLA2 action is of great importance, first breakthrough came from that, Turmerin: A water soluble antioxidant protein from Turmeric (*Curcuma longa* Linn) prevents its inflammatory action. Snake venom also induces DNA damage and the damage as assessed by us was much more than be accounted for venom alone. So, we looked for a factor that, may be acting in tandem with the venom in causing apoptosis, such a factor was secreted at 15 minutes after by human lymphocyte treatment with venom PLA2 which can cause 44% DNA damage by itself. This factor was purified by several steps was found to be of 6 kDa peptide and its profile was established by using several exocytosis inhibitors. We surmised that, this death peptide signal was of membrane origin. The sequence and homology showed that, it has 40 amino acids MSILPCKNVS IWVIKDTAAS DKEVVLGSDR AIKFLYLATG showing that, it is an apoptosis inducing factor.

### Biography

Leela Srinivas has a PhD from University of Madras and Postdoctoral studies at NCI, NIH, Fred Hutchinson and Swiss Cancer Centre. She is the Director of Adichunchanagiri Biotechnology and Cancer Research Institute, India and has published more than 75 papers in high impact journals and is the discoverer of four water soluble antioxidant proteins from Turmeric. She is the Editorial Board Member of reputed journals and has been funded regularly by NIH and has been awarded by NIH.

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