

Abstract

It has been demonstrated in versatile modes, the role of mitochondria in determining the life and death strategy of the cell [1, 2, 3, 4]. The permeability transition property of mitochondria is one such key event in deciding the death of cell upon certain stimuli [1, 2]. Considering, the permeability pores of mitochondria, there have been contrasting reports of the ensuing response of certain porins on interaction with the mitochondrial membrane. Porins are transmembrane beta barrel proteins that can literally form pores on the cell membrane. The amino acids lining the constriction zone or the eyelet region of the porin is claimed to determine the size of the pore and thereby the channel property of the protein. Mutations of the amino acids present in this region can have drastic impact on the pore size. In the present study, we check whether any alteration in the channel property of the porin OmpU has an effect on the magnitude of apoptosis induced in the target cell lines.