Size effect of colloidal selenium particles on inhibition

of LPS-induced nitric oxide production

陳玉華;陳俊榮;楊素卿;趙振瑞

Chen YH;Chang HP;Lin ZH;Wang CRC

Abstract

We have studied the size-dependent inhibition capabilities of colloidal selenium (Se) particles on lipopolysaccharide (LPS)-induced nitric oxide (NO) production in RAW 264.7 cells. Four particle sizes of the nano-Se, ranging from 45 ~ 220 nm in diameter, were examined. All of them, unlike their bulk material, show clear capabilities of inhibition and a trend dependent on the particles size. The inhibition becomes more potent as the particle size increases. It indicates that pursuing the reduction of colloidal sizes into nanoscale is not favoured in this biological system. Revue / Journal Title