7-Ketocholesterol Induces Endoplasmic Reticulum Stress in HT-29 Cells

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7-Ketocholesterol (7-Kchol, oxidized cholesterol) is an important mediator of cell death in atherosclerosis mediated by up-regulated Nox 4 gene expression. In the current study using the human colon cancer HT-29 cell line, we have demonstrated that 7-Kchol promotes endoplasmic reticulum (ER) stress via gene up-regulation of ER chaperone and membrane kinases.

Key words: 7-Ketocholesterol, Endoplasmic Reticulum Stress, Human Colon Cancer HT-29 Cell Line