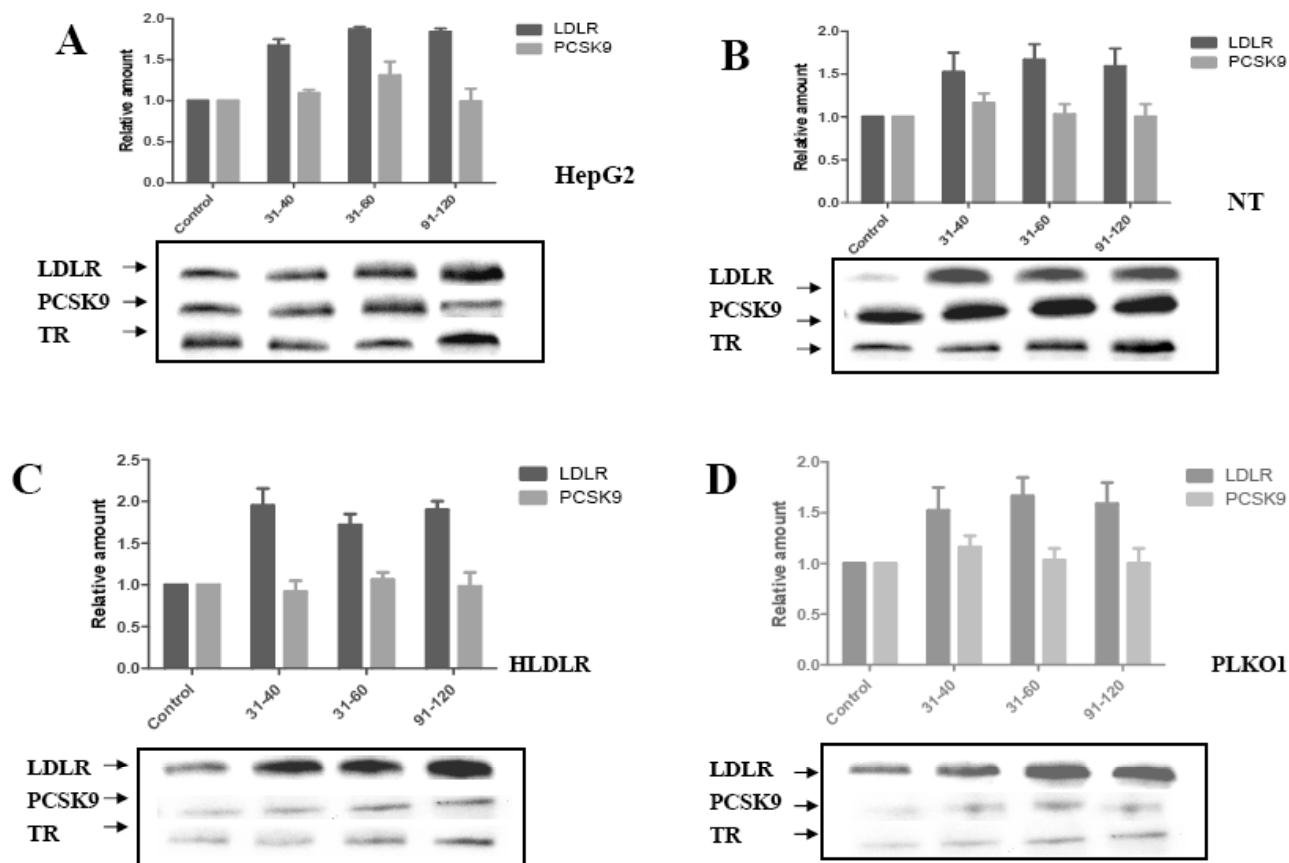


**Supplementary Fig. (1).** Toxicity effect of PCSK9 prodomain peptides on HepG2 cells. Cell survival plot of HepG2 cells in the presence of increasing concentration of PCSK9 prodomain peptides. Increasing concentrations of PCSK9 prodomain peptides were added to the culture media of HepG2 cells and the lysates were collected after 4h. 10 ml of each medium was used to determine the level of lactate dehydrogenase released from the cells according to the kit instructions from biovision. (A) hPCSK9<sup>31-40</sup>, (B) hPCSK9<sup>31-60</sup>, (C) hPCSK9<sup>61-90</sup>, (D) hPCSK9<sup>91-120</sup> (E) hPCSK9<sup>121-152</sup> and (F) hPCSK9<sup>131-152</sup>.



**Supplementary Fig. (2).** The effect of PCSK9 pro-domain peptides on LDL-R level in four HepG2 cell types. The top half of each figure show the comparative effects of PCSK9<sup>31-40</sup>, <sup>31-60</sup> and <sup>91-120</sup> peptides on LDL-R and PCSK9 levels at the concentration of 5 mg/ml in normal HepG2 cells (**A**), non-target HepG2 cells (**B**), HepG2 cells expressing high level of LDL-R (**C**) and low level of PCSK9 (**D**).