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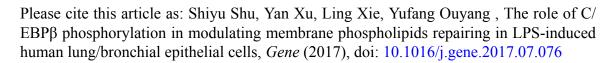
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ACCEPTED MANUSCRIPT

Research paper

The role of C/EBPβ phosphorylation in modulating membrane phospholipids repairing in LPS-induced human lung/bronchial epithelial cells

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Abbreviations: ALI, acute lung injury; ARDS, acute respiratory distress syndrome; PLA2, Phospholipase A2; CCSP, clara cell secretory protein; LPS, lipopolysaccharide; C/EBP β, CCAAT/enhancer binding protein β; SARS, severe acute respiratory syndrome; MOI, multiplicity of infection; TNF, tumor necrosis factor; IL, interleukin; PAF, platelet activating factor; AA, arachidonic acid; DMEM, Dulbecco's modified eagle medium; FBS, fetal bovine serum; CDS, coding DNA sequence; PCR, polymerase chain reaction; BCA, bicinchoninic acid; ECL, enhanced chemiluminescence; GFP, green fluorescent protein; CDK2, Cyclindependent kinase 2; ELISA, enzyme linked immunosorbent assay; LSD, Least Significant Difference.

Highlights

Over-expression of CDK2(Cyclindependent kinase 2) promoted the phosphorylation of C/EBP β . C/EBP β bound to CCSP1 promoter and facilitated its transcription.

C/EBP β phosphorylation regulation may ease the membrane damage in ALI and improve membrane repair through the C/EBP β /CCSP1/PLA2 pathway.

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