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# A low molecular weight polysaccharide isolated from *Agaricus blazei* inhibits expression of E-selectin in activated endothelial cells and attenuates tumor cell adhesion

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E-selectin-mediated cell-cell adhesion plays an important role in inflammatory processes and extravasation of tumor cells. Tumor necrosis factor-α (TNF-α) induces E-selectin gene and protein expression in human umbilical vein endothelial cells (HUVEC). In the present study, we show a low molecular weight polysaccharide isolated from *Agaricus blazei* (LMPAB) depress the TNF-α-stimulated increase in E-selectin protein expression, and similar results were obtained for E-selectin mRNA expression. The results indicated that the effect of LMPAB is based on inhibition of gene expression, and the effective inhibitory of LMPAB was in a dose-dependent manner. In addition, LMPAB depress n**uclear factor**-kappa **B** protein expression and nuclear translocation. Inhibition of E-selectin expression by LMPAB gives rise to a significant reduction in TNF-α stimulated adhesion of HT-29 cells to HUVEC. The data support the view that LMPAB might be therapeutic agent against E-selectin-mediated metastasis.

## Biography

Ji-Chegn Liu has completed his Ph.D at the age of 48 years from Beijing university of Chinese medicine and postdoctoral studies from Harbin medical University. He is the president of Qiqihar medical university. He has published more than 80 papers in reputed journals and serving as an editorial board member of repute.