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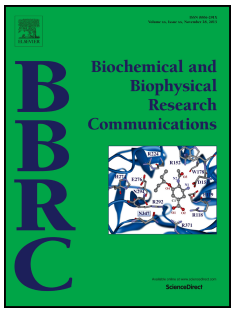

Regulation of inflammatory gene expression in macrophages by epithelial-stromal interaction 1 (Epsti1)

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Regulation of inflammatory gene expression in macrophages by epithelial-stromal interaction 1 (Epsti1)

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Abstract

Epithelial-stromal interaction 1 (*EPSTI1*) was first discovered as a gene induced in breast cancer epithelial cells by co-cultured stromal fibroblasts. There are many reports on the role of Epsti1 in cancer malignancy. Epsti1 is now well known in regulating cancer. Recently, the role of Epsti1 in the immune response has been reported; these reports suggest the role of Epsti1 in immune function, immune privilege, and autoimmune diseases. Furthermore, they show that Epsti1 is expressed in various types of immune cells. In this study, we observed that Epsti1 is highly expressed in macrophages exposed to IFNγ and lipopolysaccharide (LPS), which classically activates macrophages. Polarization of macrophage to classically activated (M1) or alternatively activated (M2) is important for mounting responses against various infections. The M1 and M2 types of macrophage have a distinct role in the immune system. However, the molecular