

## **Inhibition of functional activity of macrophages in vitro by dimer RNase *Bacillus intermedius***

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### **Abstract**

The influence of cross-linked by dimethylsuberimidate dimeric RNase from *Bacillus intermedius* on peritoneal rat macrophages has been investigated in vitro. It has been shown that dimeric RNase with concentrations of 0.5-40.0 mg/ml decreases the functional activities of macrophages. This is manifested in the inhibition of the phagocyte function of macrophages and suppression of the fusion of phagosomes with lysosomes. The change in the cytoplasmic membrane surface structure induced by the dimers, which is stronger than that induced by monomers, has been demonstrated using atomic force microscopy. The role of membrane properties modification in the inhibition effect of RNase dimers on the functional activities of macrophages is discussed.

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