



## *Technology Available for License*

# **New compound for cancer treatment and enhancing innate immunity**

### **New synthetic small-molecules for inducing Tumor Necrosis Factor- $\alpha$**

#### **Description**

Inducing Tumor Necrosis Factor- $\alpha$  (TNF- $\alpha$ ) has been viewed as a potential therapy for cancer and to enhance innate immunity. Developing TNF therapies for these applications has been limited by the availability of compounds for inducing TNF- $\alpha$ . The MSU molecules represent the first known synthetic compounds to induce TNF- $\alpha$ . The chemical structure produces a distinctly different response compared to known formyl peptide receptor induced TNF- $\alpha$ . The molecules induce a suite of defense/inflammatory responses in addition to inducing TNF- $\alpha$ . The wide range of responses suggests that this receptor may represent a unique target for therapeutic drug design.

#### **Applications**

- Develop Anticancer therapeutics
- Increase immunity during bio warfare threats, flu epidemics, or exposure of travelers to areas with endemic diseases
- Reestablish innate immunity in compromised patients
- Immunotherapeutic adjuvant

#### **Benefits**

- Rapid triggering of the immune system
- Abbreviated pathway for TNF- $\alpha$ -based drug design making it (1) easier and (2) less expensive than current compounds
- Induces broad immune responses to diseases, injuries, and cancer

#### **Technology Transfer and Development Status**

A patent is pending and a publication is available. The research is ongoing.

#### Contact for licensing or further details

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