## **DMXAA**

Catalog Number P024-5MG
Catalog Number P024-25MG

## **FEATURES**

- Potent agonist selective for mouse Stimulator of Interferon Genes (STING)
- Tumor-vascular disrupting agent in mouse cancer models
  - Antiviral, anti-tumor agent. Stimulates induction of type I Interferon (IFN) signaling



## INTRODUCTION

DMXAA is a STING (Stimulator of Interferon Genes) agonist selective for mouse STING.  $^{1,2}$  Intratumoral administration of DMXAA resulted in tumor regression and complete rejection in mouse xenografts.  $^3$  Tumor regression induced by DMXAA results from a cascade of cellular events which include disruption of tumor vasculature followed by the release of chemokines which trigger the recruitment of immune cells.  $^4$  DMXAA induced expression of IFN- $\beta$  resulting in a striking expansion of leukemia-specific T cells extending survival in two acute myeloid leukemia models.  $^5$ 

**FORM:** Off-White Powder

MOLECULAR WEIGHT: 282.3

**STORAGE:** 20°C desicated, Solutions in DMSO may be stored at -20°C for up to 3 months

**CAS NUMBER:** 117570-53-3

OTHER NAMES: 5,6-Dimethylaxanthenone-4-acetic acid; ASA404; Vadimezan

**USES:** Potent agonist selective for mouse STING, vascular disrupting agents (VDA)

and competitive inhibitor of DT-diaphorase

## **RESOURCES:**

- 1) Prantner et al. (2012), 5,6-Dimethylzanthenone-4-acetic acid (DMXAA) activates stimulator of interferon gene (STING)-dependent innate immune pathways and is regulated by mitochondrial membrane potential; J. Biol. Chem., 287 39776
- 2) Conlon et al. (2013), Mouse, but not human STING, binds and signals in response to the vascular disrupting agent 5,6-dimethylxanthenone-4-acetic acid; J. Immunol., 190 5216
- 3) Corrales et al. (2015), Direct Activation of STING in the Tumor Microenvironment Leads to Potent and Systemic Tumor Regression and immunity; Cell Rep., 11 1018
- 4) Weiss et al. (2017), The STING agonist DMXAA triggers a cooperation between T lymphocytes and myeloid cells that leads to tumor regression; Oncoimmunology, 6 e1346765
- 5) Curran et al. (2016), STING Pathway Activation Stimulates Potent Immunity Against Acute Myeloid Leukemia; Cell Rep., 15 2357