## 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.<sup>1,2</sup> Intratumoral administration of DMXAA resulted in tumor regression and complete rejection in mouse xenografts.<sup>3</sup> 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.<sup>4</sup> DMXAA induced expression of IFN- $\beta$  resulting in a striking expansion of leukemia-specific T cells extending survival in two acute myeloid leukemia models.<sup>5</sup>

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

