## Catalog \# 10-2676

DMXAA
CAS\# 117570-53-3
ASA404; Vadimezan
5,6-Dimethylxanthenone-4-acetic acid Lot \# X106911


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. ${ }^{5}$

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., 28739776
2) Conlon et al. (2013), Mouse, but not human STING, binds and signals in response to the vascular disrupting agent 5,6-dimethylxanthenone-4acetic acid; J. Immunol., 1905216
3) Corrales et al. (2015), Direct Activation of STING in the Tumor Microenvironment Leads to Potent and Systemic Tumor Regression and immunity; Cell Rep., 111018
4) Weiss et al. (2017), The STING agonist DMXAA triggers a cooperation between Tlymphocytes 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., 152357

## PHYSICAL DATA

Molecular Weight: 282.29
Molecular Formula: $\quad \mathrm{C}_{17} \mathrm{H}_{14} \mathrm{O}_{4}$
Purity:
98\% by TLC
NMR: (Conforms)
Solubility: $\quad$ DMSO (up to $5 \mathrm{mg} / \mathrm{ml}$ ) or DMF (up to $14 \mathrm{mg} / \mathrm{ml}$ with warming)
Physical Description: Off-white solid
Storage and Stability: Store as supplied desiccated at $-20^{\circ} \mathrm{C}$ for up to 2 years from the date of purchase. Solutions in DMSO or DMF may be stored at $-20^{\circ} \mathrm{C}$ for up to 3 months.

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