LKT Laboratories, Inc.

# DMXAA

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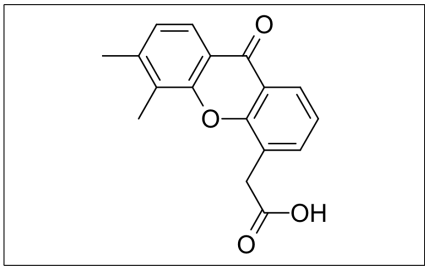
## Product Information

**Product ID** D509921
**CAS No.** 117570-53-3
**Chemical Name** 5,6-Dimethylxantheonone-4-acetic Acid

**Synonym** Vadimezan; ASA-404; ASA404; 5,6-Mexaa; NSC 640488

**Formula** $C_{17}H_{14}O_4$
**Formula Wt.** 282.30
**Melting Point**
**Purity** ≥98%
**Solubility**




***Bulk quanitites available upon request***

| Product ID | Size |
|---|---|
| D509921 | 5 mg |
| D509921 | 25 mg |
| D509921 | 100 mg |

**Store Temp** 4°C
**Ship Temp** Ambient

**Description** DMXAA (vadimezan) is a STING (stimulator of interferon genes) agonist. DMXAA triggers the disruption of tumor vasculature, followed by hypoxia and cell death and the release of chemokines. These events lead to tumor regression. While STING agonist activity has accounted for antitumor activity in mice, DMXAA does not bind to human STING. In addition to its antitumor activities. DMXAA has also exhibited antiviral activity.

**References**

Weiss JM, Guérin MV, Regnier F.et al, The STING agonist DMXAA triggers a cooperation between T lymphocytes and myeloid cells that leads to tumor regression. Oncoimmunology. 2017 6(10):e1346765. doi10.1080/2162402X.2017. PMID: 29123960.

Che X, Du XX, Cai X. et.al., Single Mutations Reshape the Structural Correlation Network of the DMXAA-Human STING Complex. J Phys Chem B. 2017 121(9):2073-2082. PMID: 28178416.

Downey CM, Aghaei M, Schwendener RA. et.al., DMXAA causes tumor site-specific vascular disruption in murine non-small cell lung cancer, and like the endogenous non-canonical cyclic dinucleotide STING agonist, 2'3'-cGAMP, induces M2 macrophage repolarization. PLoS One. 2014 9(6):e99988. PMID: 24940883.

Cerón S, North BJ, Taylor SA, Leib DA. The STING agonist 5,6-dimethylxanthenone-4-acetic acid (DMXAA) stimulates an antiviral state and protects mice against herpes simplex virus-induced neurological disease. Virology. 2019 529:23-28 PMID: 30648635.

Kim S, Li L, et al. Anticancer Flavonoids Are Mouse-Selective STING Agonists. ACS Chem. Biol. 2013 8 (7):1396-1401. DOI: 10.1021/cb400264n PMID: 23683494.