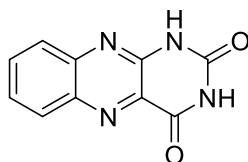


## Alloxazine

Code No.: **BIA-A2580**

Pack sizes: **25 mg, 100 mg**



Synonyms : 2,4-Dioxobenzo[g]pteridine, 6,7-Benzolumazine, Benzo[g]pteridine-2,4(3H,10H)-dione, Flavokinone, Isoalloxazine, NSC 203056, NSC 402746

## Specifications

CAS #	: <b>490-59-5</b>
Molecular Formula	: <b>C<sub>10</sub>H<sub>6</sub>N<sub>4</sub>O<sub>2</sub></b>
Molecular Weight	: <b>214.18</b>
Source	: <b>Synthetic</b>
Appearance	: <b>Yellow solid</b>
Purity	: <b>&gt;95% by HPLC</b>
Long Term Storage	: <b>-20°C</b>
Solubility	: <b>Soluble in methanol or DMSO</b>

## Application Notes

Alloxazine, the tautomer of isoalloxazine which forms the backbone of vitamin B<sub>2</sub>, is a selective adenosine A<sub>2</sub>B receptor antagonist. Alloxazine is used as a scaffold for the design of new and selective kinase inhibitors as antitumor actives. Alloxazine has antiinflammatory and antinociceptive effects in vitro.

## References

1. Adenosine A<sub>2</sub>a and A<sub>2</sub>b receptors in cultured fetal chick heart cells. High- and low-affinity coupling to stimulation of myocyte contractility and cAMP accumulation. Liang B.T. et al. *Circ. Res.* 1995, 76, 242.
2. Functional characterization of the A<sub>2</sub>b adenosine receptor in NIH 3T3 fibroblasts. Brackett LE. and Daly J.W. *Biochem. Pharmacol.* 1994, 47, 801.
3. Structural-based design, synthesis, and antitumor activity of novel alloxazine analogues with potential selective kinase inhibition. Malki W.H. et al. *Eur J Med Chem* 2018, 152, 31.
4. Adenosine kinase inhibitor attenuates the expression of inducible nitric oxide synthase in glial cells. Lee J.K. et al. *Neuropharmacology* 2005, 48, 151.