

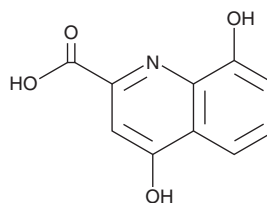
PRODUCT INFORMATION



Xanthurenic Acid

Item No. 19191

CAS Registry No.:	59-00-7
Formal Name:	4,8-dihydroxy-2-quinolinecarboxylic acid
Synonyms:	NSC 401570, Xanthurenate
MF:	C ₁₀ H ₇ NO ₄
FW:	205.2
Purity:	≥95%
UV/Vis.:	λ _{max} : 215, 218, 241, 329, 369 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly



Laboratory Procedures

Xanthurenic acid is supplied as a crystalline solid. Xanthurenic acid is sparingly soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. For biological experiments, we suggest that organic solvent-free aqueous solutions of xanthurenic acid be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of xanthurenic acid in 0.1 M NaOH is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Xanthurenic acid is formed upon tryptophan degradation by indoleamine 2,3-dioxygenase. It has been shown to be an endogenous Group II metabotropic glutamate receptor (mGluR2 and mGluR3) agonist and is implicated in the pathophysiology of schizophrenia.^{1,2} Xanthurenic acid has also been identified as an inducer of gametogenesis of *P. falciparum*, the parasite that causes malaria, and thus, is a target for the development of new methods to interrupt the transmission of malaria.³

References

1. Copeland, C. S., Neale, S. A., and Salt, T. E. Actions of xanthurenic acid, a putative endogenous Group II metabotropic glutamate receptor agonist, on sensory transmission in the thalamus. *Neuropharmacology* **66**, 133-142 (2013).
2. Fazio, F., Lionetto, L., Curto, M., *et al.* Xanthurenic acid activates mGlu2/3 metabotropic glutamate receptors and is a potential trait marker for schizophrenia. *Sci. Rep.* **5**:17799 (2015)
3. Billker, O., Lindo, V., Panico, M., *et al.* Identification of xanthurenic acid as the putative inducer of malaria development in the mosquito. *Nature* **392**, 289-269 (1998).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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