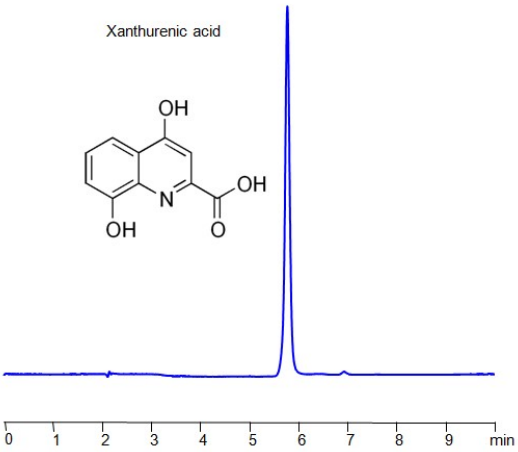
HPLC Method for Analysis of Xanthurenic acid on Newcrom BH Column



Column:	Newcrom BH
Column size:	4.6 × 150 mm, 5 µm, 100A
Column part number:	NBH-46.150.0510
Mobile phase:	Gradient MeCN – 10-60%, 10 min
Buffer:	H2SO4 – 0.2%
Flow rate:	1.0 mL/min
Detection:	UV 250 nm

Separation type: Liquid Chromatography Mixed-mode

Xanthurenic acid is a compound associated with tryptophan metabolism and is known to be excreted in the urine. It is a non-essential, non-proteinogenic amino acid derivative and is considered to be a metabolite of tryptophan. Here are some key points about xanthurenic acid:

Xanthurenic acid is characterized by the presence of two hydroxy groups and a carboxylic acid group. Structurally, it is composed of a bicyclic ring system that incorporates a benzene ring and a pyridine ring (with a nitrogen atom). The benzene ring is substituted with two hydroxy groups at positions 4 and 8, and the pyridine ring carries a carboxylic acid functionality.

Xanthurenic acid can be retained and analyzed on a mixed-mode Newcrom BH column with a mobile phase consisting of water, Acetonitrile (MeCN), and sulfuric acid. This analytical method can detect compounds with high resolution and peak symmetry using UV detection at 200 nm

Method Parameters

Column	Newcrom BH, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	Gradient MeCN – 10-60%, 10 min
Buffer	H2SO4 – 0.2%
Flow Rate	1.0 mL/min
Detection	250 nm

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Quelle: https://sielc.com/hplc-determination-of-xanthurenic-acid