Isoxanthopterin
Item No. 17564

CAS Registry No.: 529-69-1
Formal Name: 2-amino-4,7(3H,8H)-pteridinedione
Synonyms: NSC 118090, NSC 614991
MF: C₆H₅N₅O₂
FW: 179.1
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid

Laboratory Procedures

For long term storage, we suggest that isoxanthopterin be stored as supplied at -20°C. It should be stable for at least two years and is supplied as a crystalline solid.

Isoxanthopterin is soluble in water at a concentration of approximately 5 mg/L.

Description

Isoxanthopterin is a natural intermediate in the pteridine pathway, which has roles in pigmentation and cell division.¹ It can be produced naturally from 7-oxobiopterin or in vitro by the oxidation of pterin by xanthine oxidase.¹² Isoxanthopterin is a guanine analog that interferes with RNA and DNA synthesis and can inhibit cell proliferation.³⁴ Methylated derivatives of isoxanthopterin are fluorescent guanine analogs that are used to study DNA structure.³⁵

References