PRODUCT INFORMATION



7-Biopterin

Item No. 29819

| CAS Registry No.: | 2636-52-4 | |
|--|--|---|
| Formal Name: | 2-amino-7-[(1R,2S)-1,2- | |
| | dihydroxypropyl]-4(3H)-pteridinone | 0 |
| Synonyms: | Primapterin, L-Primapterin | N _N |
| MF: | C ₉ H ₁₁ N ₅ O ₃ | OH II II |
| FW: | 237.2 | |
| Purity: | ≥98% | N N NH ₂ |
| UV/Vis.: | λ _{max} : 238, 273, 343 nm | 2 · · · · · · · · · · · · · · · · · · · |
| Supplied as: | A solid | OH Ĥ |
| Storage: | -20°C | |
| Stability: | ≥4 years | |
| Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis. | | |

Laboratory Procedures

7-Biopterin is supplied as a solid. A stock solution may be made by dissolving the 7-biopterin in the solvent of choice, which should be purged with an inert gas. 7-Biopterin is slightly soluble in aqueous acid.

Description

7-Biopterin is a 7-substituted pterin.¹ It is formed by non-enzymatic rearrangement of 4a-hydroxy-tetrahydropterin in the absence of pterin-4a-carbinolamine dehydratase (PCD) in vitro and levels are elevated in the urine of hyperphenylalaninemia patients carrying heterozygous mutations in the PCBD gene encoding PCD.^{1,2}

References

- 1. Thöny, B., Neuheiser, F., Kierat, L., et al. Hyperphenylalaninemia with high levels of 7-biopterin is associated with mutations in the PCBD gene encoding the bifunctional protein pterin-4a-carbinolamine dehydratase and transcriptional coactivator (DCoH). Am. J. Hum. Genet. 62(6), 1302-1311 (1998).
- 2. Curtius, H.C., Kuster, T., Matasovic, A., et al. Primapterin, anapterin, and 6-oxo-primapterin, three new 7-substituted pterins identified in a patient with hyperphenylalaninemia. Biochem. Biophys. Res. Commun. 153(2), 715-721 (1988).

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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