# PRODUCT INFORMATION



## Risedronate (sodium salt)

Item No. 20740

CAS Registry No.: 115436-72-1

P,P'-[1-hydroxy-2-(3-pyridinyl)ethylidene] Formal Name:

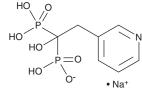
bis-phosphonic acid, monosodium salt

MF:  $C_7H_{10}NO_7P_2 \bullet Na$ 

FW: 305.1 **Purity:** ≥95%  $\lambda_{max}$ : 262 nm A crystalline solid UV/Vis.: Supplied as:

Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



### **Laboratory Procedures**

Risedronate (sodium salt) is supplied as a crystalline solid. Aqueous solutions of risedronate (sodium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of risedronate (sodium salt) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

#### Description

Risedronate is a heterocyclic orally active aminobisphosphonate. Like other bisphosphonates, it inhibits bone resorption.<sup>1,2</sup> In addition, it has antimalarial activity and inhibits growth of P. falciparum in vitro (IC<sub>50</sub> = 20.3  $\mu$ M) and P. berghei in vivo (25 mg/kg for one week).<sup>3</sup> It also inhibits protein prenylation by preventing the transfer of a farnesyl pyrophosphate group to parasite proteins. Formulations containing risedronate have been used to reduce fracture risk in both age- and steroid-related osteoporosis. 1,2,4

#### References

- 1. Nuti, R. Updates on mechanism of action and clinical efficacy of risedronate in osteoporosis. Clin. Cases Miner. Bone Metab. 11(3), 208-214 (2014).
- 2. Lems, W.F. and den Heijer, M. Established and forthcoming drugs for the treatment of osteoporosis. Neth. J. Med. 71(4), 188-193 (2013).
- 3. Jordao, F.M., Saito, A.Y., Miguel, D.C., et al. In vitro and in vivo antiplasmodial activities of risedronate and its interference with protein prenylation in Plasmodium falciparum. Antimicrob. Agents Chemother. 55(5), 2026-2031 (2011).
- Pereira, R.M.R., de Carvalho, J.F., Paula, A.P., et al. Guidelines for the prevention and treatment of glucocorticoid-induced osteoporosis. Rev. Bras. Reumatol. 52(4), 580-593 (2012).

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

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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