



LKT Laboratories, Inc.

Risedronate Sodium Hydrate

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information

Product ID R3373
CAS No. 329003-65-8
Chemical Name [1-Hydroxy-2-(3-pyridinyl)ethylidene]bisphosphonic acid monosodium salt

Synonym Risedronic acid monosodium salt, Actonel, Optinate

Formula $C_7H_{10}NO_7P_2Na \cdot 2.5H_2O$
Formula Wt. 350.13

Melting Point

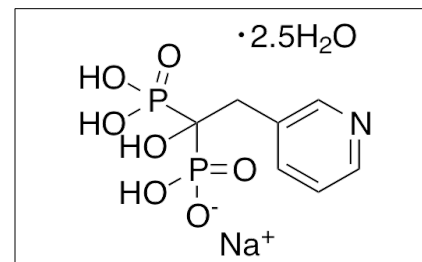
Purity $\geq 98\%$

Solubility Soluble in water. Insoluble in organic solvents.

Store Temp Ambient

Ship Temp Ambient

Description Risedronate is a bisphosphonate that exhibits anti-osteoporotic, anti-resorptive, anti-parasitic, and antimalarial activities. Risedronate inhibits bone marrow adipogenesis, decreases activity of mTORC1, and suppresses activation of NF- κ B in vitro. In animal models, risedronate induces apoptosis in osteoclasts, upregulates expression of Bim, increases bone mineral density, and inhibits bone resorption. Additionally, risedronate inhibits *Plasmodium* survival in vivo by inhibiting transfer of farnesyl pyrophosphate.



Bulk quantities available upon request

Product ID	Size
R3373	25 mg
R3373	100 mg
R3373	500 mg

References Lems WF, den Heijer M. Established and forthcoming drugs for the treatment of osteoporosis. *Neth J Med.* 2013 May;71(4):188-93. PMID: 23723112.

Jin J, Wang L, Wang XK, et al. Risedronate inhibits bone marrow mesenchymal stem cell adipogenesis and switches RANKL/OPG ratio to impair osteoclast differentiation. *J Surg Res.* 2013 Mar;180(1):e21-9. PMID: 22487394.

Matsumoto T, Nagase Y, Iwasawa M, et al. Distinguishing the proapoptotic and antiresorptive functions of risedronate in murine osteoclasts: role of the Akt pathway and the ERK/Bim axis. *Arthritis Rheum.* 2011 Dec;63(12):3908-17. PMID: 21898348.

Jordão FM, Saito AY, Miguel DC, et al. In vitro and in vivo antiplasmodial activities of risedronate and its interference with protein prenylation in *Plasmodium falciparum*. *Antimicrob Agents Chemother.* 2011 May;55(5):2026-31. PMID: 21357292.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.