

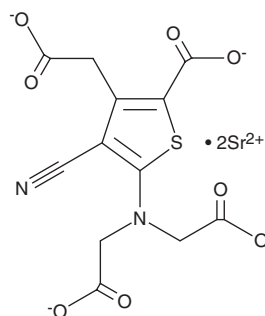
PRODUCT INFORMATION



Strontium Ranelate

Item No. 30272

CAS Registry No.: 135459-87-9
Formal Name: 5-[bis(carboxymethyl)amino]-2-carboxy-4-cyano-3-thiopheneacetic acid, distrontium salt
Synonyms: S12911, S12911-2
MF: $C_{12}H_6N_2O_8S \cdot 2Sr$
FW: 513.5
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 214, 234, 324 nm
Supplied as: A crystalline solid
Storage: $-20^\circ C$
Stability: ≥ 2 years



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

Laboratory Procedures

Strontium ranelate is supplied as a crystalline solid. Aqueous solutions of strontium ranelate can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of strontium ranelate in PBS, pH 7.2, is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Strontium ranelate is an antiosteoporotic agent.¹ It inhibits 1,25-dihydroxyvitamin D₃-induced increases in the levels of carbonic anhydrase II and the vitronectin receptor, markers of osteoclast differentiation, in isolated chicken bone marrow cells when used at concentrations of 0.1, 0.5, and 1 mM. Pretreatment or continuous treatment of bovine bone slices with strontium ranelate (1 mM) inhibits bone resorption by isolated rat osteoclasts. Strontium ranelate (750 mg/kg per day) decreases osteoclast surface and number, indicating inhibition of bone resorption, but has no effect on the bone formation rate or mineral apposition rate, indicating maintenance of bone formation, in the alveolar bone in adult cynomolgus monkeys.²

References

1. Baron, R. and Tsouderos, Y. In vitro effects of S12911-2 on osteoclast function and bone marrow macrophage differentiation. *Eur. J. Pharmacol.* **450(1)**, 11-17 (2002).
2. Buehler, J., Chappuis, P., Saffar, J.L., et al. Strontium ranelate inhibits bone resorption while maintaining bone formation in alveolar bone in monkeys (*Macaca fascicularis*). *Bone* **29(2)**, 176-179 (2001).

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.

WARRANTY AND LIMITATION OF REMEDY

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