

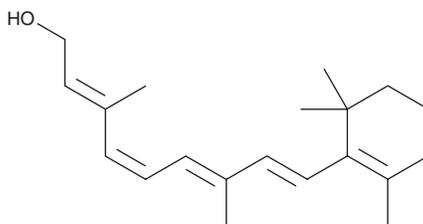
PRODUCT INFORMATION



11-*cis* Retinol

Item No. 33207

CAS Registry No.: 22737-96-8
Synonym: 11-*cis* Vitamin A Alcohol
MF: C₂₀H₃₀O
FW: 286.5
Purity: ≥85%
Supplied as: An oil
Storage: -80°C
Stability: ≥2 years
Item Origin: Synthetic



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

Laboratory Procedures

11-*cis* Retinol is supplied as an oil. A stock solution may be made by dissolving the 11-*cis* retinol in the solvent of choice, which should be purged with an inert gas. 11-*cis* Retinol is slightly soluble in chloroform and methanol.

Description

11-*cis* Retinol is an isomer of vitamin A (Item No. 20241). It is formed from vitamin A, via a *trans*-retinyl ester intermediate, by the enzyme RPE65 in the retinal pigment epithelium and then converted to 11-*cis* retinal as part of the visual cycle.^{1,2} 11-*cis* Retinol is an agonist of salamander and human red rod opsins expressed in COS cells and an inverse agonist of salamander red cone opsin, as well as human red and green cone opsins expressed in COS cells.³ It promotes pigment formation in cone, but not rod, photoreceptors.

References

1. Rando, R.R. The biochemistry of the visual cycle. *Chem. Rev.* **101(7)**, 1881-1896 (2001).
2. Guignard, T.J.P., Jin, M., Pequignot, M.O., *et al.* FATP1 inhibits 11-*cis* retinol formation via interaction with the visual cycle retinoid isomerase RPE65 and lecithin: Retinol acyltransferase. *J. Biol. Chem.* **285(24)**, 18759-18768 (2010).
3. Ala-Laurila, P., Cornwall, M.C., Crouch, R.K., *et al.* The action of 11-*cis*-retinol on cone opsins and intact cone photoreceptors. *J. Biol. Chem.* **284(24)**, 16492-16500 (2009).

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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