PRODUCT INFORMATION



ACU 4429 (hydrochloride)

Item No. 33242

CAS Registry No.: 1141934-97-5

Formal Name: (αR)-(2-aminoethyl)-3-(cyclohexylmethoxy)-

benzenemethanol, monohydrochloride

MF: C₁₆H₂₅NO₂ • HCl

FW: 299.8 **Purity:** ≥95%

Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years

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

Laboratory Procedures

ACU 4429 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the ACU 4429 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. ACU 4429 (hydrochloride) is soluble in the organic solvent DMSO at a concentration of approximately 10 mM.

Description

ACU 4429 is an inhibitor of retinal pigment epithelium 65 (RPE65; $IC_{50} = 4.4$ nM), an enzyme that catalyzes the isomerization of 11-trans retinol to 11-cis retinol (Item No. 33207) in the visual cycle.¹ It reduces rod photoreceptor recovery in dark-adapted mice after photobleaching (ED₅₀ = 0.21 mg/kg) and reversibly decreases the regeneration of 11-cis retinal oxime in the same model (ED $_{50}$ = 0.18 mg/kg). ACU 4429 also prevents light-induced photoreceptor cell loss in dark-adapted albino mice. It reduces lipofuscin autofluorescence and decreases the level of retinoid toxin (A2E) in the RPE in an Abca4-/- mouse model of Stargardt disease ($ED_{50} = 0.47 \text{ mg/kg}$).

Reference

1. Bavik, C., Henry, S.H., Zhang, Y., et al. Visual cycle modulation as an approach toward preservation of retinal integrity. PLoS One. 10(5), e0124940 (2015).

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.

WARRANTY AND LIMITATION OF REMEDY

Suyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

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