**S-8921**

**Cat. No.**: HY-19298  
**CAS No.**: 151165-96-7  
**Molecular Formula**: C₃₀H₃₆O₉  
**Molecular Weight**: 540.6  
**Target**: Others  
**Pathway**: Others  
**Storage**: Please store the product under the recommended conditions in the Certificate of Analysis.

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**BIOLOGICAL ACTIVITY**

**Description**

S-8921 is an ileal Na⁺/bile acid cotransporter (IBAT) inhibitor.

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<th>IC₅₀ &amp; Target</th>
<th>IBAT[¹]</th>
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**In Vitro**

S-8921 is an ileal Na⁺/bile acid cotransporter (IBAT) inhibitor. S-8921 inhibits the uptake velocity of 60 μM [³H] taurocholate dose-dependently in IBAT-COS cells, and the IC₅₀ value of S-8921 is 66±8 μM[¹].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

**In Vivo**

Seven-day treatment with S-8921 causes a dramatic decrease of serum cholesterol concentrations in hamsters. The hypocholesterolemic effects of S-8921 are dose-dependent, but S-8921 does not affect body weight. An increase of fecal bile acid excretion is observed especially at higher doses of S-8921[¹]. S-8921 treatment for 1 to 2 weeks causes a decrease in serum total cholesterol concentrations, with 0.01% S-8921 (4.0 to 4.6 mg/kg) being almost maximally effective[²].

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**PROTOCOL**

**Cell Assay** [¹]

Tripsinized IBAT-COS cells are suspended in the culture medium at the density of 0.8 to 1×10⁵ cells/mL. Aliquots (1 mL) of this suspension are dispersed onto 4-well plastic dishes and the cells are cultured for 48 hours. S-8921 is pre-incubated with the cells for 1 minute when its inhibitory effects are investigated. S-8921 is added as a DMSO solution, with the final concentration of DMSO in buffer A being 0.2 %[¹].

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**Animal Administration** [¹]

Male golden Syrian hamsters (8 weeks old) are used and given standard powdered diet before starting the experiment and have free access to food and water. The hamsters are divided into six groups so that each group has a similar baseline serum cholesterol concentration. After one more week of adaptation, the animals are either continued on the control diet or switched to a diet supplemented with S-8921 at concentrations of 0.001, 0.003, 0.01, 0.03, and 0.1 % (corresponding to 0.8, 2, 8, 22, and 77 mg/kg/day, respectively) for 7 days. Feces are collected over the last 2 days of the study and lyophylized. The animals are fasted overnight and blood samples are collected from the abdominal aorta under pentobarbital anaesthesia[¹].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.
REFERENCES


Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898     Fax: 609-228-5909     E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA