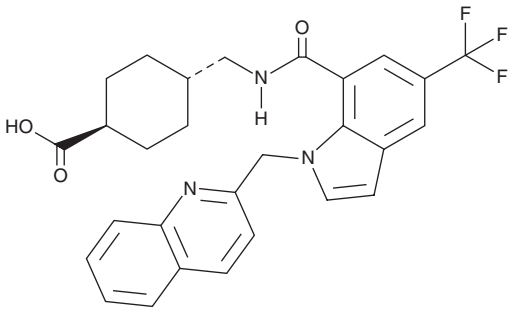
PRODUCT INFORMATION

ASP7657

Item No. 28578

CAS Registry No.: 1196045-28-9
Formal Name: *trans*-4-[[[[1-(2-quinolinylmethyl)-5-(trifluoromethyl)-1H-indol-7-yl]carbonyl]amino]methyl]-cyclohexanecarboxylic acid
MF: $C_{28}H_{26}F_3N_3O_3$
FW: 509.5
Purity: ≥95% (mixture of isomers)
UV/Vis.: λ_{max}: 234 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

ASP7657 is supplied as a crystalline solid. A stock solution may be made by dissolving the ASP7657 in the solvent of choice, which should be purged with an inert gas. ASP7657 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of ASP7657 in ethanol is approximately 12.5 mg/ml and approximately 16.5 mg/ml in DMSO and DMF.

ASP7657 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ASP7657 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. ASP7657 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

ASP7657 is an antagonist of the prostaglandin E_2 (PGE_2) receptor subtype EP_4 (K_is = 2.21 and 6.02 nM for the human and rat receptors, respectively).[1] It is selective for these receptors over the rat EP_1, EP_2, and EP_3 receptors (IC_{50}s = >1,000 nM for all), as well as a panel of 42 additional receptors and ion channels (IC_{50}s = >1,000 nM for all). ASP7657 inhibits increases in cAMP accumulation induced by PGE_2 in Jurkat cells expressing human EP_4 and CHO cells expressing the rat receptor with IC_{50} values of 0.29 and 0.86 nM, respectively. It inhibits PGE_2-induced decreases in LPS-stimulated TNF-α release in isolated rat whole blood in a dose-dependent manner. AP7657 (0.01 and 0.1 mg/kg per day) decreases albuminuria in the *db/db* mouse model of type 2 diabetes.

Reference

1. Mizukami, K., Kamada, H., Yoshida, H., *et al.* Pharmacological properties of ASP7657, a novel, potent, and selective prostaglandin EP4 receptor antagonist. *Naunyn Schmiedebergs Arch. Pharmacol.* **391(12)**, 1319-1326 (2018).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM