

ZK 756326

Chemical Properties

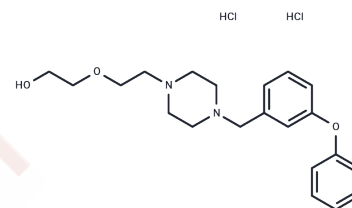
CAS No. : 874911-96-3

Formula: C₂₁H₂₈N₂O₃

Molecular Weight: 356.46

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

| | |
|----------------------------|---|
| Description | ZK 756326 is a selective, non-peptide CCR8 chemokine receptor agonist (IC ₅₀ : 1.8 μM, in human; 2.6 μM, in mouse). Displays no activity at CCR4/5 and CXCR3/4 and shows higher 28-fold selectivity over 26 other GPCRs (less selective at α ₂ A and 5-HT receptors). Induces chemotaxis and inhibits Env-mediated (HIV) cell-cell fusion. |
| Targets(IC ₅₀) | CCR |
| In vitro | ZK 756326 stimulated extracellular acidification in cells expressing human CCR8. The ability of ZK 756326 to induce a response was receptor-specific and mediated through Gαi, because it could be blocked by treatment with pertussis toxin. Like CCL1, ZK 756326 inhibited human immunodeficiency virus (HIV) fusion of cells expressing CD4 and CCR8. But unlike mCCL1, ZK 756326 bound to and activated a form of mCCR8 that was mutated to eliminate O-linked sulfation at tyrosines 14 and 15. Therefore, ZK 756326 is most probably not binding in the same manner as CCL1 but can activate the switch mechanism involved in transducing signaling events[1]. |
| Cell Research | Cells are resuspended in RPMI with 1% (w/v) BSA and 25 mM HEPES, pH 7.4 (3 × 10 ⁵ cells/well), and 100-μl aliquots were loaded into upper inserts. Samples of mCCL1 and ZK 756326 prepared in 600 μl of the same medium were placed in the lower wells. After incubation (2 h at 37°C), inserts were removed, and the migrated cells were counted in an EPICS XL flow cytometer. Duplicate wells were used for each point. A migration index was established as the ratio of the number of cells that had migrated in response to the chemokine or to ZK 756326 divided by the number of cells that had migrated in response to buffer alone. (Only for Reference) |

Solubility Information

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|------------|--|
| Solubility | DMSO: 3.85 mg/mL (10.79 mM), Sonication is recommended. H ₂ O: 181.7 mM, Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|--|

A DRUG SCREENING EXPERT

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|------------|------------|
| 1 mM | 2.8054 mL | 14.0268 mL | 28.0536 mL |
| 5 mM | 0.5611 mL | 2.8054 mL | 5.6107 mL |
| 10 mM | 0.2805 mL | 1.4027 mL | 2.8054 mL |
| 50 mM | 0.0561 mL | 0.2805 mL | 0.5611 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Haskell Ca, et al. Mol Pharmacol. 2006, 69(1):309-16.

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This product is for Research Use Only. Not for Human or Veterinary or Therapeutic Use

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