

## Certificate of Analysis

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**Product Name:** DC 260126

**Catalog No.:** 5357

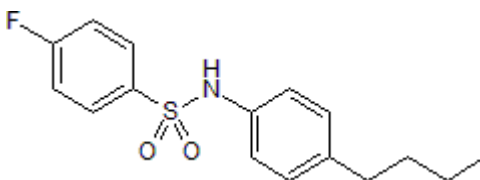
**Batch No.:** 1

CAS Number: 346692-04-4

IUPAC Name: *N*-(4-Butylphenyl)-4-fluorobenzenesulfonamide

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>16</sub>H<sub>18</sub>FNO<sub>2</sub>S  
**Batch Molecular Weight:** 307.38  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
ethanol to 100 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 98.9% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	62.52	5.9	4.56
Found	62.59	5.9	4.53

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

Free fatty acid receptor 1 (FFA1/GPR40) antagonist. Inhibits FFA-induced increases in intracellular Ca<sup>2+</sup> levels and suppresses palmitic acid potentiated glucose-stimulated insulin secretion in Min6 pancreatic β cells in vitro. Decreases serum insulin levels, improves insulin sensitivity and reduces the number of apoptotic pancreatic β cells in obese diabetic (db/db) rats.

**Physical and Chemical Properties:**

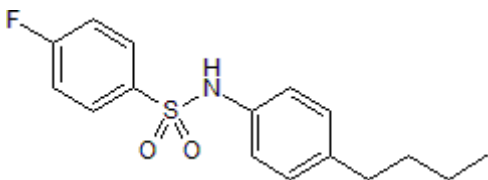
Batch Molecular Formula: C<sub>16</sub>H<sub>18</sub>FNO<sub>2</sub>S

Batch Molecular Weight: 307.38

Physical Appearance: White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**References:**

**Sun et al** (2013) DC260126: a small-molecule antagonist of GPR40 that protects against pancreatic β-Cells dysfunction in db/db mice. PLoS ONE **8** e66744. PMID: 23776696.

**Zhang et al** (2010) DC260126, a small-molecule antagonist of GPR40, improves insulin tolerance but not glucose tolerance in obese Zucker rats. Biomed.Pharmacother. **64** 647. PMID: 20888730.

**Hu et al** (2009) A novel class of antagonists for the FFAs receptor GPR40. Biochem.Biophys.Res.Comm. **390** 557. PMID: 19818732.

**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO to 100 mM  
ethanol to 100 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

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