

## Certificate of Analysis

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**Product Name:** Repaglinide

**Catalog No.:** 3805

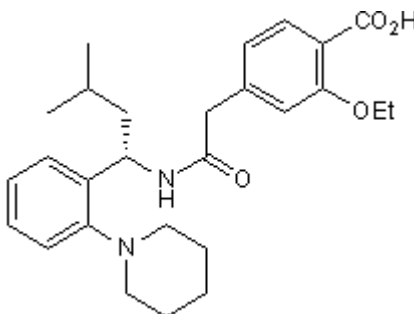
**Batch No.:** 1

CAS Number: 135062-02-1

IUPAC Name: 2-Ethoxy-4-[2-[[[(1S)-3-methyl-1-[2-(1-piperidinyl)phenyl]butyl]amino]-2-oxoethyl]benzoic acid

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>27</sub>H<sub>36</sub>N<sub>2</sub>O<sub>4</sub>  
**Batch Molecular Weight:** 452.59  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
ethanol to 100 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 100% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Optical Rotation:** [α]<sub>D</sub> = +7.73 (Concentration = 1.06, Solvent = Methanol)  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	71.65	8.02	6.19
Found	71.69	8.1	6.35

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**Description:**

K<sub>ir</sub>6 (K<sub>ATP</sub>) channel blocker that binds with high affinity for SUR1 when co-expressed with K<sub>ir</sub>6.2 (K<sub>d</sub> = 0.42 nM). Antidiabetic glucose regulator with hypoglycaemic effect in vivo.

**Physical and Chemical Properties:**

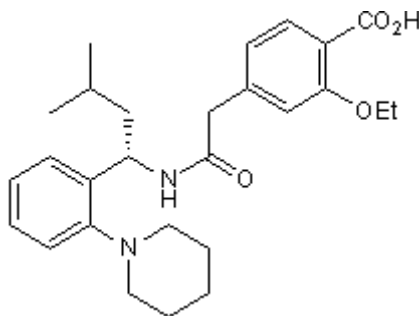
Batch Molecular Formula: C<sub>27</sub>H<sub>36</sub>N<sub>2</sub>O<sub>4</sub>

Batch Molecular Weight: 452.59

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at +4°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.

**References:**

**Mark and Grell** (1997) Hypoglycaemic effects of the novel antidiabetic agent repaglinide in rats and dogs. *Br.J.Pharmacol.* **121** 1597. PMID: 9283692.

**Hansen et al** (2005) Kir6.2-dependent high-affinity repaglinide binding to β-cell K<sub>ATP</sub> channels. *Br.J.Pharmacol.* **144** 551. PMID: 15678092.

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