

**Product Name:** ONO 1078

**Catalog No.:** 3026

**Batch No.:** 1

CAS Number: 103177-37-3

IUPAC Name: *N*-[4-Oxo-2-(1*H*-tetrazol-5-yl)-4*H*-1-benzopyran-8-yl]-4(4-phenylbutoxy)benzamide

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>27</sub>H<sub>23</sub>N<sub>5</sub>O<sub>4</sub>·½H<sub>2</sub>O

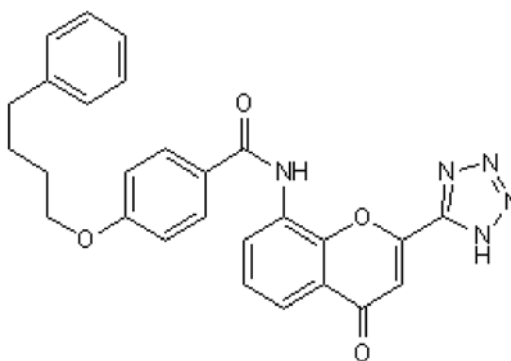
**Batch Molecular Weight:** 490.51

**Physical Appearance:** White solid

**Solubility:** DMSO to 50 mM

**Storage:** Store at +4°C

**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows >99.8% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	66.11	4.93	14.28
Found	66.05	4.94	14.36

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**Description:**

Selective cysteinyl leukotriene receptor 1 (CysLT<sub>1</sub>) antagonist (IC<sub>50</sub> values are ~ 4 - 7 and 3620 nM for CysLT<sub>1</sub> and CysLT<sub>2</sub> respectively). Inhibits contraction of airway smooth muscle, microvascular leakage into airways and eosinophil infiltration. Can decrease symptoms of bronchial asthma. Also TREK2 activator (pEC<sub>50</sub> = 5.8); exhibits selectivity for TREK-2 over other K<sub>2P</sub> channels.

**Physical and Chemical Properties:**

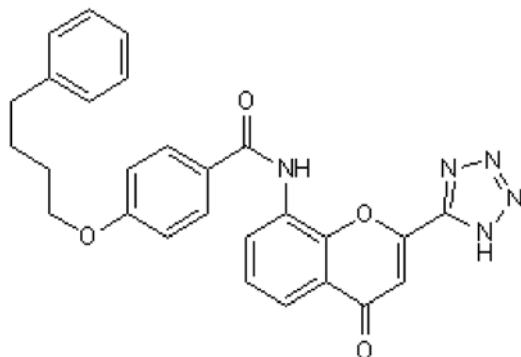
Batch Molecular Formula: C<sub>27</sub>H<sub>23</sub>N<sub>5</sub>O<sub>4</sub>·½H<sub>2</sub>O

Batch Molecular Weight: 490.51

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 50 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:**

**Suzuki et al** (2003) Inhibition of human eosinophil activation by a cysteinyl leukotriene receptor antagonist (Pranlukast; ONO-1078). *J.Asthma* **40** 395. PMID: 12870835.

**Heise et al** (2000) Characterization of the human cysteinyl leukotriene 2 receptor. *J.Biol.Chem.* **275** 30531. PMID: 10851239.

**Lynch et al** (1999) Characterization of the human leukotriene CysLT1 receptor. *Nature* **399** 789. PMID: 10391245.

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