

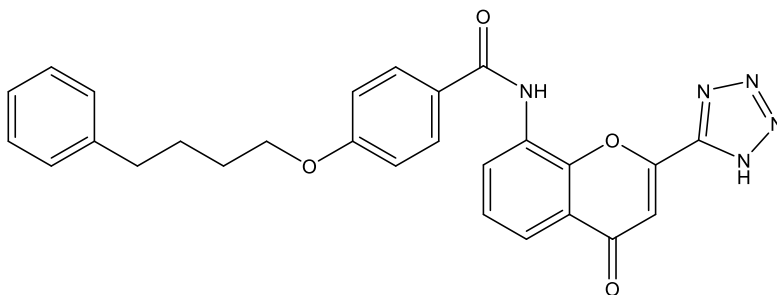
**Catalog # 10-2441**

**Pranlukast**

CAS# 103177-37-3

N-[4-oxo-2-(2H-tetrazol-5-yl)chromen-8-yl]-4-(4-phenylbutoxy)benzamide; ONO 1078

Lot # FBA2172



Pranlukast is a selective Leukotriene CysLT1 antagonist<sup>1</sup> and has been used in the treatment of asthma<sup>2</sup>. Pranlukast is also an inhibitor of GPR17<sup>3</sup> (IC<sub>50</sub>'s = 10.5nM hGPR17, 31nM rGPR17) and is superior to Montelukast in achieving functional inhibition<sup>4</sup>.

- 1) Nakai et al. (1988), *New Potent Antagonists of Leukotrienes C<sub>4</sub> and D<sub>4</sub>. 1. Synthesis and Structure-Activity Relationships*; J.Med.Chem. **31** 84
- 2) Taniguchi et al. (1993), *The effect of an oral leukotriene antagonist, ONO-1078, on allergen-induced immediate bronchoconstriction in asthmatic subjects*; J.Allergy Clin.Immunol. **92** 507
- 3) Ciana et al. (2006), *The orphan receptor GPR17 identified as a new dual uracil nucleotides/cysteinyI-leukotrienes receptor*; EMBO J. **25** 4615
- 4) Hennen et al. (2013), *Decoding Signaling and Function of the Orphan G Protein-Coupled Receptor GPR17 with a Small-Molecule Agonist*; Sci.Signal. **6** ra93

**PHYSICAL DATA**

Molecular Weight:	481.51
Molecular Formula:	C <sub>27</sub> H <sub>23</sub> N <sub>5</sub> O <sub>4</sub>
Purity:	>98%
	NMR: (Conforms)
Solubility:	Soluble in DMSO (25 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Store solutions in DMSO at -20°C for up to 1 month.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**