

## 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/cysteinyl-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>N₅O₄
Purity: >98%

NMR: (Conforms)

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.

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