

**Product Name** : AM103

**Synonyms** : AM 103

**Cat No.** : M26054

**CAS Number** : 1147872-22-7

**Molecular Formula** : C<sub>36</sub>H<sub>40</sub>N<sub>3</sub>NaO<sub>4</sub>S

**Formula Weight** : 633.8

**Chemical Name** : —

**Description**

AM103 is an effective and selective inhibitor of FLAP (IC<sub>50</sub> = 4.2 nM). (In Vitro): AM103 is against the 5 most common CYP isoforms with IC<sub>50</sub>s >30 μM for CYP2D6 and >50 μM for CYP3A4, CYP2C9, CYP2C19, and CYP1A2. AM103 shows IC<sub>50</sub>s of 350, 113, and 117 nM against human, rat, and mouse whole-blood ionophore-stimulated LTB<sub>4</sub> production, respectively. (In Vivo): AM103 has high bioavailability of 64%, low clearance of 2.9 mL/min/kg, low volume of distribution of 0.41 L/kg, and a long i.v. half-life of 5.2 h in dogs. AM103 (10 mg/kg) inhibits the increase in CysLTs and EPO by approximately 60% and reduces the level of IL-5. In a model of chronic lung inflammation using ovalbumin-primed and challenged BALB/c mice, AM103 reduces eosinophil peroxidase, CysLTs, and IL-5 in the bronchoalveolar lavage fluid. AM103 increases survival time in mice exposed to a lethal intravenous injection of platelet-activating factor. In the rat lung challenged in vivo with calcium ionophore, AM103 inhibits LTB<sub>4</sub> and cysteinyl leukotriene production with ED<sub>50</sub> values of 0.8 and 1 mg/kg, respectively.

**Pathway** : Immunology/Inflammation

**Target** : FLAP

**Receptor** : —

**Solubility** : —

**SMILES** : [NaH].COc1ccc(cn1)-c1ccc(Cn2c(CC(C)(C)C(O)=O)c(SC(C)(C)C)c3cc(OCc4ccccc4)ccc23)cc1

**Storage** : (-20°C)

**Stability** : ≥ 2 years

**Reference** :

1. Cuong V Nguyen, et al. Surface potential of 1-hexanol solution: comparison with methyl isobutyl carbinol. J Phys Chem B. 2013 Jun 27;117(25):7615-20.