

**Product Name** : AC1903

**Synonyms** : —

**Cat No.** : M22075

**CAS Number** : 831234-13-0

**Molecular Formula** : C<sub>19</sub>H<sub>17</sub>N<sub>3</sub>O

**Formula Weight** : 303.36

**Chemical Name** : —

**Description** : AC1903 is a specific inhibitor of TRPC5 channel, and has been shown to suppress severe proteinuria and prevent podocyte loss. AC1903, that specifically blocks TRPC5 channel activity in glomeruli of proteinuric rats. Chronic administration of AC1903 suppressed severe proteinuria and prevented podocyte loss in a transgenic rat model of FSGS. AC1903 also provided therapeutic benefit in a rat model of hypertensive proteinuric kidney disease. TRPC5 activity drives disease and that TRPC5 inhibitors may be valuable for the treatment of progressive kidney diseases.

**Pathway** : Membrane Transporter/Ion Channel

**Target** : TRP/TRPV Channel

**Receptor** : TRPC5

**Solubility** : —

**SMILES** : C(NC1=NC2=CC=CC=C2N1CC1=CC=CC=C1)C1=CC=CC=C1

**Storage** : (-20°C)

**Stability** : ≥ 2 years

**Reference** :

1. Shama S H, Pablo J L, Montesinos M S, et al. Design, synthesis and characterization of novel N-heterocyclic-1-benzyl-1H-benzo[d]imidazole-2-amines as selective TRPC5 inhibitors leading to the identification of the selective compound, AC1903[J]. Bioorganic & Medicinal Chemistry Letters, 2018.