

Catalog	Unit
TBI1453-5MG	5 mg
TBI1453-25MG	25 mg

### Product Details

**Formal Name:** 4-[(3-Carboxy-1-oxo-2-propen-1-yl)amino]-[2,2'-bithiophene]-5-carboxylic acid, 5-methyl ester

**Molecular Formula:** C<sub>14</sub>H<sub>11</sub>NO<sub>5</sub>S<sub>2</sub>

**Formula Weight:** 337.37

**CAS Number:** 682741-29-3

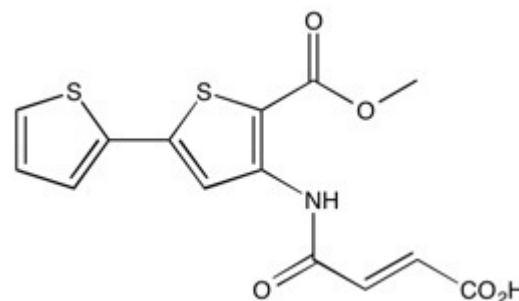
**Purity:** >98%

**Formulation:** powder

**Solubility:** Soluble in DMSO (up to 50 mg/ml)

**Storage:** RT

**Stability:** ≥ 1 year.



### Applications

FABP inhibitor

### Functions

Inhibits fatty acid binding proteins. Inhibits lipolysis in 3T3-L1 adipocytes and reduces LPS-stimulated inflammation in cultured macrophages. Acts as an antagonist of the protein-protein interaction between AFABP/aP2 and hormone sensitive lipase but does not activate PPAR $\gamma$  in macrophages. Inhibits FABP-dependent and fatty acid-stimulated leukotriene C4 biosynthesis. Reduces intracellular free fatty acid levels, lowering macrophage inflammation and ER stress<sup>3</sup>. Reduces LPS-stimulated IL-1 $\beta$  secretion in a mouse model. Inhibits VLDL-induced foam cell formation.

### Application Procedures

First dissolved in DMSO (up to 50 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 2 months.

**For research use only.**