

## FSC-231, PICK1 PDZ domain inhibitor

Catalog	Unit
TBI1406-5MG	5 mg
TBI1406-25MG	25 mg

### Product Details

**Formal Name:** (E)-Ethyl-2-cyano-3-(3,4-dichlorophenyl)acryloylcarbamate

**Molecular Formula:** C<sub>13</sub>H<sub>10</sub>Cl<sub>2</sub>N<sub>2</sub>O<sub>3</sub>

**Formula Weight:** 313.14

**CAS Number:** N/A

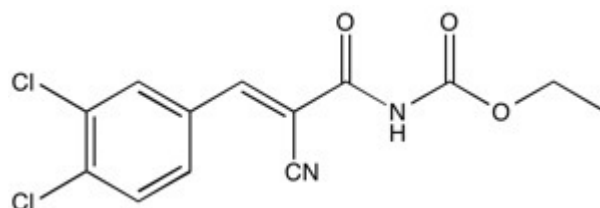
**Purity:** >98%

**Formulation:** powder

**Solubility:** Soluble in DMSO (up to 35 mg/ml with warming) or in Ethanol (up to 18 mg/ml with warming)

**Storage:** RT

**Stability:** ≥ 1 year.



### Applications

PICK1 PDZ domain inhibitor

### Functions

The first small-molecule inhibitor of the PDZ domain in protein interacting with C kinase 1 (PICK1). Binds to PICK1 PDZ domain with affinity similar to that of the endogenous peptide ligands ( $K_i \sim 10.1 \mu\text{M}$ ). Does not bind to PDZ domains of postsynaptic density protein 95 (PSD-95) nor glutamate receptor interacting protein 1 (GRIP1). Pretreatment of cultured hippocampal neurons inhibits coimmunoprecipitation of the AMPA receptor GluR2 subunit with PICK1. FSC231 accelerated recycling of fluorophore-tagged GluR2 in hippocampal neurons after internalization in response to NMDA receptor activation. Blocks the expression of both long-term depression and long-term potentiation. Attenuates cocaine seeking in a rodent model. Blocks PICK1-induced anti-inflammatory effect in acute liver injury.

### Application Procedures

First dissolved in DMSO (up to 35 mg/ml with warming) or in Ethanol (up to 18 mg/ml with warming), then diluted to aqueous buffer. Solutions in DMSO or ethanol may be stored at  $-20^\circ\text{C}$  for up to 1 month.

**For research use only.**