

## DPTIP, Neutral sphingomyelinase 2 inhibitor

Catalog	Unit
TBI4394-5MG	5 mg
TBI4394-25MG	25 mg

### Product Details

**Formal Name:** 2,6-Dimethoxy-4-(4-phenyl-5-thiophen-2-yl-1H-imidazol-2-yl)phenol

**Molecular Formula:** C<sub>21</sub>H<sub>18</sub>N<sub>2</sub>O<sub>3</sub>S

**Formula Weight:** 378.4

**CAS Number:** 351353-48-5

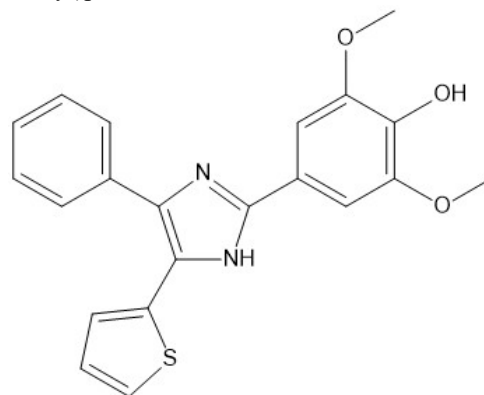
**Purity:** >98%

**Formulation:** Powder

**Solubility:** Soluble in DMSO (> 25 mg/ml)

**Storage:** -20°C

**Stability:** ≥ 2 years



### Applications

Neutral sphingomyelinase 2 inhibitor

### Functions

Selective, potent (IC<sub>50</sub> = 30 nM), and brain penetrant inhibitor of neutral sphingomyelinase 2 (nSMase2). In a mouse model of brain injury, it inhibited IL-1β-induced astrocyte-derived extracellular vesicle release which reduced cytokine upregulation and attenuation of infiltration of immune cells to the brain leading to decreased inflammation. Displayed potent antiviral activity against Zika and West Nile viruses (EC<sub>50</sub> Vero cells: 0.26 μM and 1.56 μM respectively). Acted synergistically with enzalutamide to significantly suppress cell proliferation, colony formation, and migration of metastatic castration resistant prostate cancer cells. It also reduced tumor size and weight in a prostate cancer mouse model.

### Application Procedures

First dissolved in Soluble in DMSO (> 25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

**For research use only.**