

## Arecoline HBr, ACAT1 inhibitor

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Catalog	Unit
TBI1016-250MG	250 mg
TBI1016-1G	1 g

### Product Details

**Formal Name:** 1,2,5,6-Tetrahydro-1-methyl-3-pyridinecarboxylic acid, methyl ester, hydrobromide

**Molecular Formula:** C<sub>8</sub>H<sub>13</sub>NO<sub>2</sub> HBr

**Formula Weight:** 236.11

**CAS Number:** 300-08-3

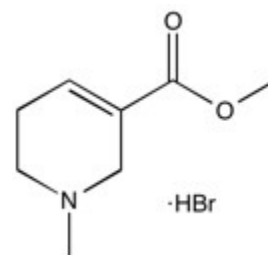
**Purity:** >98%

**Formulation:** powder

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

**Storage:** RT

**Stability:** ≥ 2 years.



### Applications

ACAT1 inhibitor

### Functions

Tyrosine407 phosphorylation activates mitochondrial acetyl-CoA acetyltransferase 1 (ACAT1) by stabilizing its tetramer. This is believed to be the mechanisms by which ACAT1 is “hijacked” and contributes to the Warburg effect in cancer. Arecoline is a covalent inhibitor of ACAT1 which binds to and disrupts only ACAT1 tetramers (IC<sub>50</sub>=11.1 μM). ACAT2 and DLAT are not inhibited. Treatment of xenograft nude mice with Arecoline resulted in a dose-dependent reduction in tumor mass. Agonist at muscarinic acetylcholine receptors M1 – M5 (EC<sub>50</sub> in the range of 7-410 nM). May be effective in dementia.

### Application Procedures

First dissolved in Water (up to 50 mg/ml), then diluted to aqueous buffer. Solutions are not stable – make fresh daily.

**For research use only.**