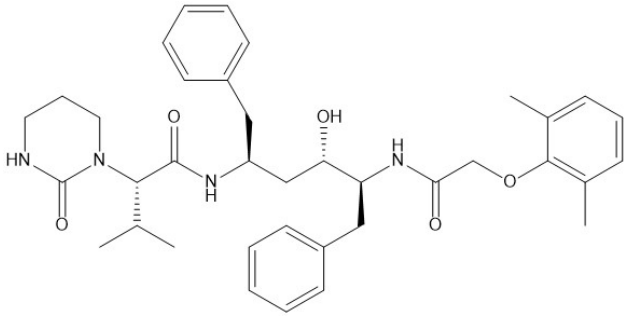
Tribioscience

Lopinavir, HIV protease inhibitor

Catalog	Unit
TBI5063-25MG	25 mg
TBI5063-100MG	100 mg

Product Details

Formal Name: N-[(1S,3S,4S)-4-[[2-(2,6-Dimethylphenoxy)acetyl]amino]-3-hydroxy-5-phenyl-1-(phenylmethyl)pentyl]tetrahydro-αS-(1-methylethyl)-2-oxo-1(2H)-pyrimidineacetamide
Alternate Names: ABT-378; A-157378
Molecular Formula: $C_{37}H_{48}N_4O_5$
Formula Weight: 628.8
CAS Number: 192725-17-0
Purity: >98%
Formulation: Powder
Solubility: Soluble in DMSO (up to at least 65 mg/ml)
Storage: -20°C
Stability: ≥ 2 years.



Applications

HIV protease inhibitor

Functions

A potent and selective inhibitor of HIV-1 protease (IC_{50} = 6.5 nM, HIV cultured in peripheral blood mononuclear cells; K_i = 1.3 pM) which is highly selective over mammalian proteases. Lopinavir suffers from poor bioavailability due to extensive cytochrome P450-mediated metabolism. Thus combination with ritonavir suppresses metabolism and is a preferred regimen for treatment of HIV infection. Inhibits replication of SARS CoV-2 virus *in vitro*, IC_{50} = 26.63 µM.

Application Procedures

First dissolved in DMSO (up to at least 65 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 1 month.

For research use only.