Product Name: TCS 46b  
CAS Number: 302799-86-6  
IUPAC Name: 1,3-Dihydro-5-[3-[4-(phenylmethyl)-1-2H-benzimidazol-2-one

1. PHYSICAL AND CHEMICAL PROPERTIES

   Batch Molecular Formula: \( C_{22}H_{23}N_3O \)  
   Batch Molecular Weight: 345.44  
   Physical Appearance: White solid  
   Solubility: DMSO to 100 mM  
   Ethanol to 100 mM  
   Storage: Store at RT

2. ANALYTICAL DATA

   TLC: \( R_f = 0.17 \) (Ethyl acetate)  
   HPLC: Shows >99% purity  
   \(^1\)H NMR: Consistent with structure  
   Mass Spectrum: Consistent with structure

   Microanalysis:  
   Carbon Hydrogen Nitrogen  
   Theoretical 76.49 6.71 12.16  
   Found 76.48 6.72 11.99

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Description:
Orally active, subtype-selective NR1A/NR2B NMDA receptor antagonist (IC$_{50}$ values are 5.3, 35000 and > 100000 nM for NR1A/2B, NR1A/2A and NR1A/2C receptor subtypes respectively). Potentiates the effect of L-DOPA in 6-OHDA-lesioned rats following oral administration.

Physical and Chemical Properties:
Batch Molecular Formula: $C_{22}H_{22}N_{3}O$
Batch Molecular Weight: 345.44
Physical Appearance: White solid

Minimum Purity: >98%

References: