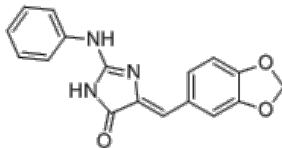


|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                    |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| <b>Product Name</b>      | : Leucettine L41                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                    |
| <b>Synonyms</b>          | : Leucettine L41; Leucettine-L41; LeucettineL41                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                    |
| <b>Cat No.</b>           | : M10457                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                    |
| <b>CAS Number</b>        | : 112978-84-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                    |
| <b>Molecular Formula</b> | : C <sub>17</sub> H <sub>13</sub> N <sub>3</sub> O <sub>3</sub>                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
| <b>Formula Weight</b>    | : 307.31                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                    |
| <b>Chemical Name</b>     | : (5Z)-5-(1,3-Benzodioxol-5-ylmethylene)-3,5-dihydro-2-(phenylamino)-4H-imidazol-4-one                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                    |
| <b>Description</b>       | A novel potent cdc2-like kinase (CLKs) and DYRKs inhibitor with IC <sub>50</sub> of 40, 35 and 15 nM for DYRK1A, DYRK2 and CLK1, respectively; inhibits the phosphorylation of serine/arginine-rich proteins (SRp), a family of proteins regulating pre-RNA splicing, modulates alternative pre-mRNA splicing in cell-based reporting system; induces mTOR-dependent autophagy, prevents Aβ <sub>25-35</sub> -induced memory impairments and neurotoxicity in the mouse hippocampus. |                                                                                    |
| <b>Pathway</b>           | : Cell Cycle/DNA Damage                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                    |
| <b>Target</b>            | : CLK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                    |
| <b>Receptor</b>          | : CLK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                    |
| <b>Solubility</b>        | : —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                    |
| <b>SMILES</b>            | : O=C1NC(NC2=CC=CC=C2)=N/C1=C\C3=CC=C(OCO4)C4=C3                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                    |
| <b>Storage</b>           | : (-20°C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                    |
| <b>Stability</b>         | : ≥ 2 years                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                    |
| <b>Reference</b>         | :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                    |

1. Fant X, et al. Mol Pharmacol. 2014 Mar;85(3):441-50. | 2. Naert G, et al. Eur Neuropsychopharmacol. 2015 Nov;25(11):2170-82. | 3. Debdab M, et al. J Med Chem. 2011 Jun 23;54(12):4172-86. | 4. Tahtouh T, et al. J Med Chem. 2012 Nov 8;55(21):9312-30.