IC261
Item No. 17260

CAS Registry No.: 186611-52-9
Formal Name: 1,3-dihydro-3-[(2,4,6-trimethoxyphenyl)methylene]-2H-indol-2-one
Synonym: SU5607
MF: C_{18}H_{17}NO_{4}
FW: 311.3
Purity: \geq 95%
UV/Vis.: \lambda_{max}= 255, 358 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 2 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

IC261 is supplied as a crystalline solid. A stock solution may be made by dissolving the IC261 in the solvent of choice. IC261 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of IC261 in ethanol is approximately 0.5 mg/ml and approximately 30 mg/ml in DMSO and DMF.

IC261 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, IC261 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. IC261 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

IC261 is a reversible, ATP-competitive inhibitor of casein kinase 1 (CK1) that inhibits CK1\(\delta\) and CK1\(\epsilon\) (IC_{50} \approx 1 \mu M for both), as well as CK1\(\alpha\) (IC_{50} = 16 \mu M).\(^1\) It is at least 100-fold less effective against PKA, p34^{ck2}, and p55^{fyn}.\(^1\) IC261, at 1 \mu M, inhibits cytokinesis in primary mouse embryo fibroblasts.\(^2\) IC261 is used to elucidate the role of CK1 in cells and in whole organisms.\(^3-5\)

References