Phthalazinone pyrazole

Item No. 10735

CAS Registry No.: 880487-62-7
Formal Name: 4-[(5-methyl-1H-pyrazol-3-yl)amino]-2H-phenyl-1-phthalazinone
MF: $C_{18}H_{15}N_5O$
FW: 317.4
Purity: ≥98%
UV/Vis.: $\lambda_{\text{max}}$: 331 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years

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

Laboratory Procedures

Phthalazinone pyrazole is supplied as a crystalline solid. A stock solution may be made by dissolving the phthalazinone pyrazole in the solvent of choice. Phthalazinone pyrazole is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of phthalazinone pyrazole in these solvents is approximately 0.15 and 0.25 mg/ml, respectively.

Description

Three Aurora kinases, A-C, are involved in phosphorylation events that are critical for the completion of mitosis.\(^1\) Aurora A, involved in centrosomal assembly and acentrosomal spindle assembly, is overexpressed in many tumors.\(^2\) Phthalazinone pyrazole is a potent inhibitor of Aurora A kinase (IC\(_{50}\) = 31 nM).\(^3\) It does not inhibit Aurora B kinase at doses up to 100 μM.\(^3\) Phthalazinone pyrazole inhibits the proliferation of HCT116, COLO 205, and MCF-7 cells (IC\(_{50}\) = 7.8, 2.9, and 1.6 μM, respectively).\(^3\)

References