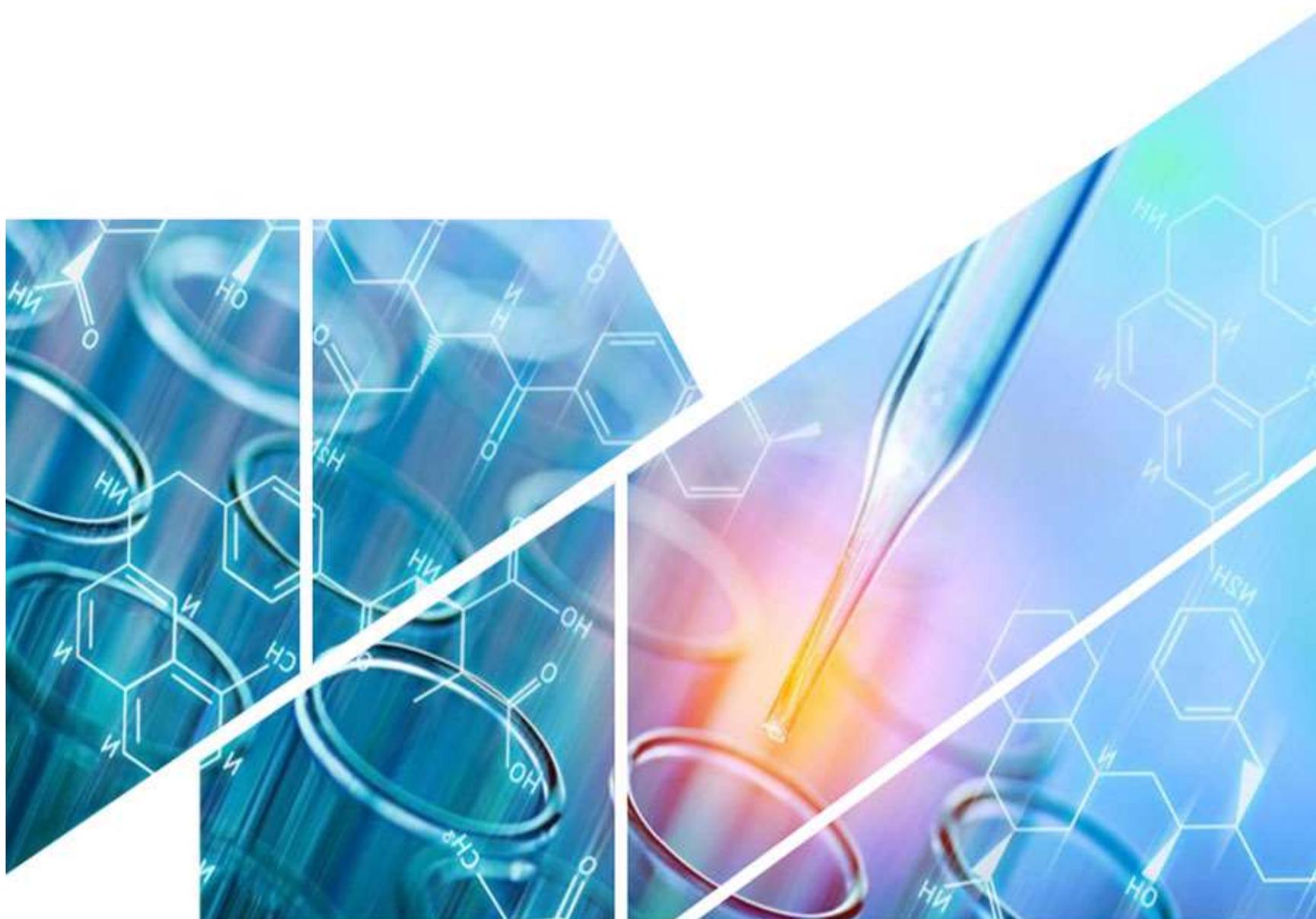


CK1 (Casein kinase 1) Inhibitors (inhibitors, agonists and modulators)



The Casein kinase 1 family of protein kinases is serine/threonine-selective enzymes that function as regulators of signal transduction pathways in most eukaryotic cell types. CK1 isoforms are involved in Wnt signaling, circadian rhythms, nucleo-cytoplasmic shuttling of transcription factors, DNA repair, and DNA transcription. It has 7 isoforms: α , β , γ 1, γ 2, γ 3, δ and ϵ .



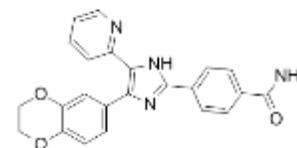
D4476 - CAS 301836-43-1

Catalog Number: 301836-43-1

Molecular Weight: 398.41

Molecular Formula: C₂₃H₁₈N₄O₃

Description: D4476 is a potent, selective ATP-competitive inhibitor of CK1 (casein kinase 1).



PF-670462 - CAS 950912-80-8

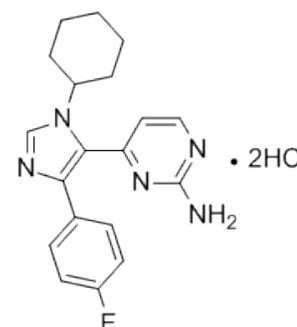
Catalog Number: B0084-272284

Price: \$198/25 mg

Molecular Weight: 410.32

Molecular Formula: C₁₉H₂₂Cl₂FN₅

Description: PF-670462 is a potent and selective inhibitor of CK1 ϵ in isolated enzyme preparations. It inhibits PER protein nuclear translocation causing phase shifts in circadian rhythms and attenuates methamphetamine-stimulated locomotion in vivo. It less effectively inhibits a wide variety of related or common kinases.



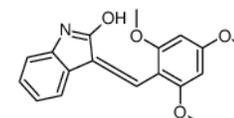
SU5607 (IC261) - CAS 186611-52-9

Catalog Number: 186611-52-9

Molecular Weight: 311.34

Molecular Formula: C₁₈H₁₇NO₄

Description: IC261, also known as SU5607, is a potent and selective CK1 inhibitor. IC261 triggers the mitotic checkpoint and induces p53-dependent postmitotic effects.



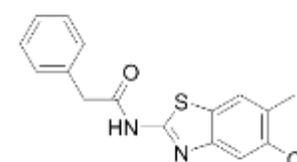
LH846 - CAS 639052-78-1

Catalog Number: 639052-78-1

Molecular Weight: 316.81

Molecular Formula: C₁₆H₁₃ClN₂O₂S

Description: LH846 is a selective inhibitor of CK1 δ , which displays no inhibitory activity at CK2. It inhibits CK1 δ -dependent phosphorylation and degradation of PER1 protein, showing to lengthen the circadian period in U2OS cells, with minimal effect on amplitude.



SR-3029 - CAS 1454585-06-8

Catalog Number: 1454585-06-8

Molecular Weight: 480.45

Molecular Formula: C₂₃H₁₉F₃N₈O

Description: SR-3029, a small molecule inhibitor that targets specifically CK1 δ /CK1 ϵ , was effective at reducing the growth of breast cancer in multiple mouse models without any signs of major toxicity. IC₅₀=97 nM

