

Protein Kinase Inhibitors

Protein kinases are key regulators in cell signaling pathways in eukaryotes. They act by chemically modifying other proteins with phosphate groups, a process called phosphorylation. These enzymes are known to regulate the majority of cellular pathways, especially those involved in signal transduction.

The human genome codes for more than 500 protein kinases. Misregulation of these proteins has been linked to several diseases, including cancer, psoriasis and chronic inflammation. For this reason, small molecule protein kinase inhibitors have become important research tools for the elucidation of the varied roles of kinases and their mechanisms of action. These molecules have been key developments in drug pipelines of the pharmaceutical and biotechnology industries and also in the growing need to treat cancer and inflammation.

Item	Description	Research Application	Sizes
J61633	Erlotinib monohydrochloride	Non-small cell lung cancer; a reversible EGFR inhibitor.	1g, 5g
J62984	Sorafenib	Liver and kidney cancers; inhibits VEGFR and PDGFR tyrosine kinases as well as Raf kinases.	1g, 2g, 5g
J62578	Nilotinib	Inhibits Bcr-Abl tyrosine kinase. Especially useful in certain types of leukemia	100mg, 500mg
J62299	Lapatinib	Breast cancer; inhibits EGFR and Her2/neu tyrosine kinases.	100mg, 200mg, 1g
J62401	Lapatinib ditosylate		100mg, 500mg, 1g
J63090	K252c	Inhibits protein kinase c with IC_{50} of 214 nM. Inhibits CaM kinase with IC_{50} of 297 μ M for the brain enzyme.	1mg, 5mg
J61687	Protein Kinase inhibitor	Also called K252a. An alkaloid isolated from <i>Nocardioopsis</i> sp. soil fungi. Inhibits CaM kinase with an IC_{50} of 1.8 nM	1mg, 5mg
J62936	Tyrphostin A25	Inhibits epidermal growth factor receptor tyrosine kinase with an IC_{50} of 3 μ M.	5mg, 10mg, 25mg
J63058	Tyrphostin A9	Selective inhibitor of PDGF receptor tyrosine kinase	50mg, 100mg
J60950	SB 202190, 99+%	Selective, potent and cell permeable inhibitor of p38 MAP kinase	25mg, 50mg, 100mg
H26425	Hypericin, 98%	A polycyclic dione that acts as a non-specific kinase inhibitor	25mg, 100mg
J60955	Tamoxifen citrate	A cell permeable and reversible protein kinase C inhibitor (IC_{50} = 10 μ M).	1g, 5g
A15807	Quercetin dihydrate, 97%	A cell permeable kinase inhibitor. Induces apoptosis in Molt-4 and MCAS tumor cell lines	25g, 100g, 500g

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