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# Aurora Kinase Inhibitor MLN8054

National Cancer Institute

## Source

National Cancer Institute. *Aurora Kinase Inhibitor MLN8054*. NCI Thesaurus. Code C61075.

An orally bioavailable, highly selective small molecule inhibitor of the serine/threonine protein kinase Aurora A kinase with potential antineoplastic activity. Aurora kinase inhibitor MLN8054 binds to and inhibits Aurora kinase A, resulting in disruption of the assembly of the mitotic spindle apparatus, disruption of chromosome segregation, and inhibition of cell proliferation. Aurora A localizes in mitosis to the spindle poles and to spindle microtubules and is thought to regulate spindle assembly. Aberrant expression of Aurora kinases occurs in a wide variety of cancers, including colon and breast cancers.