**BIOLOGICAL ACTIVITY:**

AZD4573 is a potent and highly selective CDK9 inhibitor (IC₅₀ of <4 nM) that enables transient target engagement for the treatment of hematologic malignancies[1]. IC₅₀ & Target: IC₅₀: <3 nM (CDK9)[1]  

**In Vitro:** Short-term treatment with AZD4573 led to a rapid dose- and time-dependent decrease in cellular pSer2-RNAPII, resulting in activation of caspase 3 and cell apoptosis in a broad range of haematological cancer cell lines (e.g. caspase activation EC₅₀ 13.7 nM in an acute myeloid leukemia model MV4-11)[1].  

**In Vivo:** AZD4573 exhibits a short half-life in multiple species (less than one hour in rat, dog and monkey) and good solubility for intravenous administration[1].

**References:**


**SMILES:**

CIC1=CN=C(C[C@H]2CC[C@H](NC(C)=O)C2)=O)C=C1C3=C(C(C(C)(C)C4)N4N=C3