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PROGETTO: Structure-Based Drug Design of PIM-1 kinase inhibitors

DESCRIZIONE: PIM-1 is a gene identified in “**P**roviral Insertion site of **M**oloney Murine Leukemia Virus”. PIM-1 is a serine/threonine kinase involved in regulating cell survival, proliferation and differentiation. Over **50%** PIM-1 is expressed in aberrant somatic hypermutation in diffuse large cell lymphoma (DLCL), the most common form of non-Hodgkin's lymphoma. These findings suggests that Pim-1 is valuable anticancer drug target. The main of this project is to **prevent ATP binding to PIM-1 kinase by designing specific inhibitors**. Computer Aided Drug Design approaches like **Pharmacophore generation, Virtual screening and Docking** are being used effectively in this project.