



PLK3 Protein Crystal

Catalog: CBCRY55

PRODUCT INFORMATION

Name PLK3 Protein Crystal

Cat No. CBCRY55

Fragment Polo box domain

Protein Description Polo-like Kinase 3

Background

Polo-like kinase 3 (PLK3) is a member of the highly conserved polo-like kinase family of serine/threonine kinases that are critical regulators of cell cycle progression, mitosis, cytokinesis, and the DNA damage response. Members of this family are characterized by an amino-terminal kinase domain and a carboxy-terminal bipartite polo box domain that functions as a substrate-binding motif and a cellular localization signal. This gene has also been implicated in stress responses and double-strand break repair. In human cell lines, this protein is reported to associate with centrosomes in a microtubule-dependent manner, and during mitosis, the protein becomes localized to the mitotic apparatus.

Protein Classification Transferase

Structure Weight 32791.14 Da

Method X-Ray Diffraction

Resolution 1.90 Å

Ligand Chemical Component SULFATE ION, 9ZP

Reference

Brown K, Charrier JD, Durrant S, Griffiths M, Hudson C, Kay D, Knegtel R, Odonnell M, Pierard F, Twin H, Weber P, Young S. Discovery of oral polo-like kinase (Plk) inhibitors with enhanced selectivity profile using residue targeted drug design. No recorded citation in PubMed