



# PLK1 Protein Crystal

Catalog: CBCRY53

## PRODUCT INFORMATION

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| <b>Product Name</b>           | PLK1 Protein Crystal                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Catalog Number</b>         | CBCRY53                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Fragment</b>               | Polo box domain                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Protein Description</b>    | Polo-like Kinase 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Background</b>             | Polo-like kinase proteins acts by binding and phosphorylating proteins are that already phosphorylated on a specific motif recognized by the POLO box domains. The Ser/Thr protein kinase belongs to the CDC5/Polo subfamily. It is highly expressed during mitosis and elevated levels are found in many different types of cancer. Depletion of this protein in cancer cells dramatically inhibited cell proliferation and induced apoptosis; hence, it is a target for cancer therapy. |
| <b>Protein Classification</b> | Transferase                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Structure Weight</b>       | 54544.60 Da                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>PDBID</b>                  | 1Q4O                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Method</b>                 | X-Ray Diffraction                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Resolution</b>             | 2.20 Å                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Reference</b>              | Cheng KY, Lowe ED, Sinclair J, Nigg EA, Johnson LN. The crystal structure of the human polo-like kinase-1 polo box domain and its phospho-peptide complex. Embo J. (2003) 22 p.5757                                                                                                                                                                                                                                                                                                       |



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| <b>cDNA Length</b> | 1809 |
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## USAGE GUIDELINES

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|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General Handling</b> | Avoid excessive mixing or vortexing to prevent aggregation.<br>Long-term storage above -80°C may result in aggregate formation. Thaw on ice before use. |
| <b>Storage</b>          | <b>Short term:</b> +2°C to +8°C (up to 1 week)<br><b>Long term:</b> -80°C (stable for 12 months)                                                        |
| <b>Stability</b>        | Stable for 12 months at -80°C. Avoid repeated freeze-thaw cycles.                                                                                       |
| <b>Freeze / Thaw</b>    | Can be frozen, but limit to 3 freeze/thaw cycles to maintain particle integrity.                                                                        |

**Important:** This product is for **research use only**. Not intended for diagnostic or therapeutic applications. Please refer to the Safety Data Sheet (SDS) for complete handling and safety information.