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# Protein Phosphatase 2A Inhibitor LB-100

National Cancer Institute

## Source

National Cancer Institute. *Protein Phosphatase 2A Inhibitor LB-100*. NCI Thesaurus. Code C106430.

A water soluble inhibitor of the protein phosphatase 2A (PP2A), with potential chemo- and radiotherapy enhancing activity. Upon injection, PP2A inhibitor LB-100 inhibits the removal of phosphate groups from proteins essential for cell cycle progression. When used with radio- or chemotherapy treatment, this agent prevents the activation of PP2A-mediated repair mechanisms and allows for malignant cells to progress through the cell cycle without having their damaged DNA repaired. This enhances the cytotoxic effect of the chemotherapeutic or radiotherapeutic agent and results in tumor cell apoptosis. PP2A, a serine/threonine phosphatase that plays a key role in the control of cell growth and DNA damage repair.