Molecular Formula:

$C_{23}H_{24}O_8$

Molecular Weight:

428.4 g/mol

Purity:

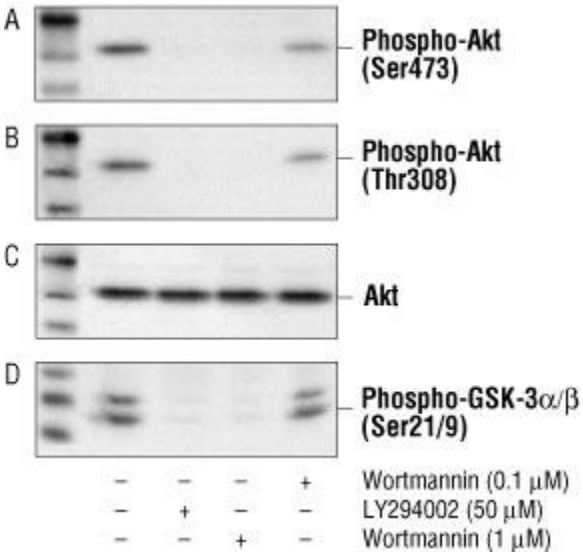
>99%

Directions for Use

For 2 mM stock, dissolve 1 mg in 1.16 ml DMSO. For experiments with cultured cells, CST recommends treating with wortmannin at concentrations between 0.2 µm and 1 µm, for one hour prior to, and for the duration of, the stimulation. See MSDS for further information.

Precautions: This compound is only sold for use in extremely dilute solutions for biological research. No other use is intended and any other use involves substantial hazards. This compound should never be handled in powder or aerosol form or in any other form susceptible to uncontrolled release in the laboratory, even in very small quantities.

Western Blotting



Western blot analysis of extracts from untreated, wortmannin and/or LY294002 treated Jurkat cells, using Phospho-Akt (Ser473) Antibody #9271 (A), Phospho-Akt (Thr308) Antibody #9275 (B), Akt Antibody #9272 (C) and Phospho-GSK-3alpha/beta (Ser21/9) Antibody #9331 (D).

Background

Wortmannin is a very potent, specific and direct inhibitor of PI3 kinase, originally derived from fungus (1,2). The inhibition is irreversible and noncompetitive. Wortmannin does not inhibit PI4 kinase, protein kinase C or protein tyrosine kinase (3).

1. Nakanishi, S. et al. (1992) *J. Biol. Chem.* 267, 2157-2163.
2. Arcaro, A. and Wymann, M.P. (1993) *Biochem. J.* 296, 297-301.
3. Powis, G. et al. (1994) *Cancer Res.* 54, 5241-5248.