



[Ala92]-p16 (84-103)

Kinase Inhibitor

E1K P1077

Kinase Inhibitor Name: [Ala92]-p16 (84-103)**Catalog Number:** E1KP1077**Quantity:** 1mg

1. PHYSICAL AND CHEMICAL PROPERTIES

M.W.: 2123.44**Formula:** $C_{95}H_{159}N_{31}O_{28}$ **Solubility:** Soluble to 2 mg/ml in sterile water**Purity:** >99%**Storage:** at -20°C 2 years**CAS No.:** 189064-08-2**Molecular Structure:**

Asp-Ala-Ala-Arg-Glu-Gly-Phe-
Leu-Ala-Thr-Leu-Val-Val-Leu-
His-Arg-Ala-Gly-Arg-AcOH

2. Biological Activity

[Ala92]-p16 (84-103) is a peptide derived from the tumor suppressor protein p16. [Ala92]-p16 (84-103) can bind to cdk6. The aberrant p16 RNA transcripts encoded key peptides (amino acids 84-103) involved in binding with cyclin-dependent kinase (CDK) 4. GST-aberrant p16 fusion proteins were found to interact with endogenous CDK4 in vitro. Furthermore, overexpression of these aberrant p16 RNA transcripts resulted in decreased cell proliferation rate, enlargement of cell shape and reduced level of hyperphosphorylated forms of pRb. [1][2]

3. References:

Characterization of the cyclin-dependent kinase inhibitory domain of the INK4 family as a model for a synthetic tumour suppressor molecule Robin Fahraeus, Sonia Lañ, et al. *Oncogene* 1998;16:587-596
Abereant p16INK4A RNA transcripts expressed in hepatocellular carcinoma cell lines regulate pRb phosphorylation by binding with CDK4, resulting in delayed cell cycle progression Cho J-W, Jeong Y-W, et al. *Liver International* 2003;23:194-200

The pharmacological and toxicological properties of this product have not been fully investigated. Exercise caution in use and handling. This product must not be used in humans.

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