

## PS48 (PDK1 Activator)

Catalog number: B-0360

Molecular Formula: C<sub>17</sub>H<sub>15</sub>ClO<sub>2</sub>

MW: 286.75

CAS: 1180676-32-7

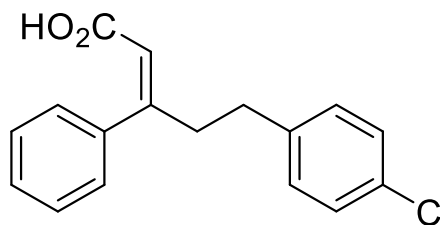
Alternate Name: (2Z)-5-(4-Chlorophenyl)-3-phenyl-pent-2-enoic acid

Solubility: DMSO (>20 mg/ml); Ethanol (>10 mg/ml)

Storage and Handling: Store dry at 4 °C. Stock solutions should be stored frozen (-20 °C or below). Protect from light.

Background: Utilizing low molecular weight compounds to modulate protein kinase activities is a major trend of current pharmaceutical and biological research. PS48 activates phosphoinositide-dependent protein kinase 1 (PDK1) by binding exclusively to PIF-binding pocket rather than the ATP binding site.

References: 1) A. Stroba *et al.* "3,5-Diphenylpent-2-enoic Acids as Allosteric Activators of the Protein Kinase PDK1: Structure-Activity Relationships and Thermodynamic Characterization of Binding as Paradigms for PIF-Binding Pocket-Targeting Compounds", *J. Med. Chem.*, 2009, 52 (15), 4683-4693 2) L.D. Spate, *et al.* "PS48 can replace bovine serum albumin in pig embryo culture medium, and improve in vitro embryo development by phosphorylating AKT" *Molecular Reproduction & Development* 2015, DOI: 10.1002/mrd.22474.



Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. This product is manufactured and shipped only in small quantities, intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

Warranty and Disclaimer: Echelon warrants the product conforms to the specifications stated herein. In the event of nonconformity, Echelon will replace products or refund purchase price, at its sole option, and Echelon shall not be responsible for any other loss or damage, whether known or foreseeable to Echelon. No other warranties apply, express or implied, including but not limited to warranty of fitness for any purpose or implied warranty of merchantability. Purchaser is solely responsible for all consequences of its use of the product and Echelon assumes no responsibility therefore, including success of purchaser's research and development, or health or safety of any uses of the product.

