Creative Enzymes®

Malantide, Protein Kinase Substrate

Cat. No. CSUB-0865

Lot. No. (See product label)

Introduction

Description	Malantide, Protein Kinase Substrate is a synthetic tetradecapeptide derived from the phosphorylation site of the β-subunit of phosphorylase kinase. The compound is a highly specific substrate for PKA and has displayed PKI inhibition >90% substrate phosphorylation in various tissue extracts at a K_m=15 μM for PKA and 223 μM for PKG. Malantide is also a substrate for PKC and catalyzes the phosphorylation of serine in other substrates, including troponin I. More recently the compound has been used in studies to directly detect the phosphorylated peptides by electrospray ionization mass spectrometry; shown as a realistic alternative to radioactivity and fluorescence detection in determining enzymatic activity.
Applications	A highly specific PKA substrate
Synonyms	RTKRSGSVYEPLKI; RTLRSGSVYEPLKI; ARG-THR-LYS-ARG-SER-GLY-SER-VAL-TYR-GLU-PRO-LEU-LYS-ILE; H-ARG-THR-LYS-ARG-SER-GLY-SER-VAL-TYR-GLU-PRO-LEU-LYS-ILE-OH; HIGH-AFFINITY CAMP DEPENDENT PROTEIN KINASE SUBSTRATE; MALANTIDE; arg-thr-lys-arg-ser-gly-ser-val-tyr-*glu-pro-leu-; MALANTIDE SYNTHETIC >97% CAMP-DEPENDENT PROTEI

Product Information

Form	Solid
CAS No.	86555-35-3
Molecular Formula	C72H124N22O21
Molecular Weight	1633.8
Solubility	Soluble in water (1 mg/ml).
Refractive Index	1.361 (lit.)

Storage and Shipping Information

Storage	Store at -20° C