Creative Enzymes®

Peptidyl-Prolyl Cis/Trans Isomerase from Human, Recombinant

Cat. No. NATE-0910

Lot. No. (See product label)

Introduction

Description	Human Pin 1 is a peptidyl-prolyl cis/trans isomerase (PPIase) that interacts with NIMA and essential for cell cycle regulation Pin1 is nuclear PPIase containing a WW protein interaction domain, and is structurally and functionally related to Ess1/Ptf1, an essential protein in budding yeast. PPIase activity is necessary for Ess1/Pin1 function in yeast. Pin1 is thus an essential PPIase that regulates mitosis presumably by interacting with NIMA and attenuating its mitosis-promoting activity. Substrates of Pin1 include the mitotic regulators (Cdc25 phosphatase and NIMA, PLK I, Wee, and Myt1 kinases), several transcription factors like b-Catenin, c-Jun, and the tumor suppressor protein p53, and some specific proteins like the RNA Pol II, the cytoskeleton protein tau, and the G1/S protein Cyclin D1.
Synonyms	Peptidyl-prolyl cis-trans isomerase NIMA-interacting 1; EC 5.2.1.8; Rotamase Pin1; PPIase Pin1; DOD; UBL5; PIN1; PPIase

Product Information

Species	Human
Source	E. coli
Appearance	Sterile filtered colorless solution.
Molecular Weight	18.2 kDa
Purity	Greater than 95.0% as determined by (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Activity	> 162 nmoles/min/ug
Buffer	The protein containing 20mM Tris-HCl buffer (pH7.5) 0.1M NaCl, 5mM DTT & 20% Glycerol.
Unit Definition	Specific activity is defined as the amount of enzyme that cleave 1umole of suc-AAFP-pNA per minute at 1C in Tris-Hcl pH8.0 using chymotrypsin.

Storage and Shipping Information

Stability	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.