



Product Datasheet

Product Name	PIN1 Human Recombinant
Cata No	CB500507
Source	<i>Escherichia Coli.</i>
Synonyms	Peptidyl-prolyl cis-trans isomerase NIMA-interacting 1, EC 5.2.1.8, Rotamase Pin1, PPlase Pin1, DOD, UBL5, PIN1, PPlase.

Description

Human Pin 1 is a peptidyl-prolyl cis/trans isomerase (PPlase) that interacts with NIMA and essential for cell cycle regulation Pin1 is nuclear PPlase containing a WW protein interaction domain, and is structurally and functionally related to Ess1/Ptf1, an essential protein in budding yeast. PPlase activity is necessary for Ess1/Pin1 function in yeast. Pin1 is thus an essential PPlase 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.

PPlase Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 163 amino acids & having a molecular mass of 18.2 kDa.

The PIN1 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered colorless solution.

Purity

Greater than 95.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

Formulation

The protein containing 20mM Tris-HCl buffer (pH7.5) 0.1M NaCl, 5mM DTT & 20% Glycerol.

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.

Sequence

MADEEKLPPG WEKRMSRSSG RYVYFNHITN
ASQWERPSGN SSSGGKNGQG EPARVRCSHL
LVKHSQSRRP SSWRQEKITR TKEEALELIN
GYIQKIKSGE EDFESLASQF SDCSSAKARG
DLGAFSRGQM QKPFEDASFA LRTGEMSGPV
FTDSGIHIIL RTE