

## 32-2671: PIN1 Recombinant Protein

**Alternative Name :** Peptidyl-prolyl cis-trans isomerase NIMA-interacting 1, EC 5.2.1.8, Rotamase Pin1, PPlase Pin1, DOD, UBL5, PIN1, PPlase.

### Description

Source : Escherichia Coli. 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. 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.

### Product Info

**Amount :** 20 µg  
**Purification :** Greater than 95.0% as determined by SDS-PAGE.  
**Content :** The PIN1 protein solution (1 mg/ml) containing 20mM Tris-HCl buffer (pH7.5) 0.1M NaCl, 5mM DTT & 20% Glycerol.  
**Storage condition :** 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.  
**Amino Acid :** MADEEKLPPG WEKRMSRSSG RYYFNHITN ASQWERPSGN SSSGGKNGQG EPARVRCSHL  
LVKHSQSRRP SSWRQEKITR TKEEALELIN GYIQIKSGE EDFESLASQF SDCSSAKARG DLGAFSRGQM  
QKPFEDASFA LRTGEMSGPV FTDSGIHIL RTE.

### Application Note

Specific activity is > 330 nmoles/min/mg, and is defined as the amount of enzyme that cleaves 1µmole of suc-AAFP-pNA per minute at 25C in Tris-HCl pH8.0 using chymotrypsin.