**Pin 1(Peptidyl-prolyl cis/trans isomerase) Human, Recombinant, E.coli**

**Cat.NO.: TP03409**

3th Edition

**Synonyms:**Protein (peptidyl-prolyl cis/trans isomerase) NIMA-interacting 1, NIMA-interacting protein 1, DOD, UBL5, Rotamase Pin1, PPIase Pin1.

**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 ?-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.

**Form:**Liquid. In 20 mM Tris-HCl buffer (pH 7.5) containing 100 mM NaCl, 5 mM DTT, 20% glycerol.

**Molecular Weight:**18.2 kDa (163aa), confirmed by MALDI-TOF

**Sequences:**
MADEEKLPPGWEKRMSRSSGRVYYFNHITNASQWERPSGNSSSGGKNGQGEPARVRCSHLLVKHSQSRRPSS
WRQEKITRTKEEALELINGYIQKIKSGEEDFESLASQFSDCSSAKARGDLGAFSRGQMQKPFEDASFALRTGEMSG
PVFTDSGIHIILRTE

**Purity:**> 95% by HPLC

**Concentration:**1 mg/ml (determined by Bradford assay)

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.