

## 32-6886: PIN1 Mouse

**Application :** Functional Assay

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

### Description

Source: Escherichia Coli.

Sterile Filtered clear solution.

Pin 1 is a peptidyl-prolyl cis/trans isomerase (PPlase) which 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.

PIN1 Mouse Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 188 amino acids (1-165 a.a) and having a molecular mass of 20.8kDa. PIN1 is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Greater than 95.0% as determined by SDS-PAGE.

**Content :** PIN1 protein solution (1mg/ml) containing Phosphate buffered saline (pH7.4) and 10% 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 :** MGSSHHHHHH SSGLVPRGSH MGSMADDEEKL PPGWEKRMSR SSGRVYYFNH ITNASQWERP  
SGGSTVGGSS KNGQGEPKAV RCSHLLVKHS QSRRPSSWRQ EKITRSKEEA LELINGYIQK IKSGEEDFES  
LASQFSDCSS AKARGDLGPF SRGQMCKPFE DASFALRTGE MSGPVFTDSG IHILRTE.

### Application Note

Specific activity is > 1,200 nmol/min/mg, and is defined as the amount of enzyme that cleaves 1nmole of suc-AAFP-PNA per minute at 37°C in Tris-HCl pH 8.0 using chymotrypsin.