

Recombinant mouse Pin1 protein

Catalog Number: ATGP3566

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-165aa

UniProt No.

Q9QUR7

NCBI Accession No.

NP_075860

Alternative Names

Peptidyl-prolyl cis-trans isomerase NIMA-interacting1, O610025L01Rik, D9Bwg1161e

PRODUCT SPECIFICATION

Molecular Weight

20.8 kDa (188aa) Confirmed by MALDI-TOF

Concentration

1mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 95% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

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

Tag

His-Tag

Application

SDS-PAGE, Enzyme Activity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

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Description

Pin1, also known as peptidyl-prolyl cis-trans isomerase NIMA-interacting1, is nuclear PPlase containing a WW protein interaction domain, and is structurally and functionally related to Ess1/Ptf1, an essential protein in budding 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 beta-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. Recombinant mouse PIN1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

Amino acid Sequence

MGSSHHHHHH SGLVPRGSH MGSMADDEEKL PPGWEKRMSR SSGRVYYFNH ITNASQWERP SGGSTVGGSS
KNGQGEPKV RCSHLLVKHS QSRRPSSWRQ EKITRSKEEA LELINGYIQK IKSGEEDFES LASQFSDCSS AKARGDLGPF
SRGQMQLPFE DASFALRTGE MSGPVFTDSG IHILRTE

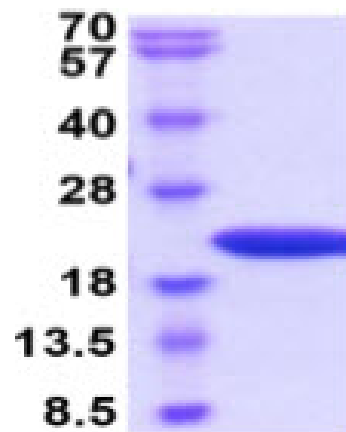
General References

Wulf GM., et al. (2002) J Biol Chem. 277(50):47976-9
Zacchi P., et al. (2002) Nature. 419(6909): 853-7.

DATA

SDS-PAGE

(kDa)



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)