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Datasheet for ABIN7197302 PIN1 Protein

Overview

Quantity:	100 µg
Target:	PIN1
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant

Product Details

Purpose:	Recombinant Human PIN1/Rotamase Pin1 Protein
Sequence:	Met 1-Glu 163
Characteristics:	A DNA sequence encoding the mature form of human PIN1 (Q13526-1) (Met 1-Glu 163) was expressed and purified.
Purity:	> 95 % as determined by reducing SDS-PAGE.

Target Details

Target:	PIN1
Alternative Name:	PIN1/Rotamase Pin1 (PIN1 Products)
Background:	Background: Peptidyl-prolyl cis-trans isomerase Pin1, also known as Peptidyl-prolyl cis-trans isomerase NIMA-interacting 1, Rotamase Pin1 and PIN1, peptidyl-prolyl cis/trans isomerase (PPIase), is a nucleus protein. PIN1 is a peptidyl-prolyl isomerase that can alter the conformation of phosphoproteins and so affect protein function and/or stability. PIN1 regulates a number of proteins important for cell-cycle progression and is presumed to operate as a

Target Details

molecular timer of this important process. PIN1 is an essential PPlase that regulates mitosis presumably by interacting with NIMA and attenuating its mitosis-promoting activity. PIN1 displays a preference for an acidic residue N-terminal to the isomerized proline bond. Alterations in the level of PIN1 can influence hyperproliferative diseases such as cancer. PIN1 has been implicated in multiple aspects of cell cycle regulation. It has been suggested that PIN1 function is required for both normal mitotic progression and reentry into the cell cycle from quiescence. PIN1 is also a target of several oncogenic pathways and is overexpressed in human breast cancer. Its overexpression can lead to upregulation of cyclin-D1 and transformation of breast epithelial cells in collaboration with the oncogenic pathways. PIN1 plays a pivotal role in breast development and may be a promising new anticancer target. Pin1 activity regulates the outcome of proline-directed kinase (e.g. MAPK, CDK or GSK3) signalling and consequently regulates cell proliferation (in part through control of cyclin D1 levels and stability) and cell survival. Recent data also implicate Pin1 as playing an important role in immune responses, at least in part by increasing the stability of cytokine mRNAs by influencing the protein complexes to which they bind.

Synonym: DOD,UBL5

Molecular Weight:	18.2 kDa
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Application Details

Restrictions:	For Research Use only
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Handling

Format:	Lyophilized
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Reconstitution:	Please refer to the printed manual for detailed information.
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Buffer:	Lyophilized from sterile 50 mM Tris, 10 % glycerol, pH 8.0
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Storage:	4 °C,-20 °C,-80 °C
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Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
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