abcam

Product datasheet

Recombinant Human PIN4 protein ab186986

Description

Product name	Recombinant Human PIN4 protein
Purity	> 95 % SDS-PAGE. Greater than 95% as determined by SEC-HPLC and reducing SDS-PAGE.
Endotoxin level	< 1.000 Eu/µg
Expression system	Escherichia coli
Accession	Q9Y237-2
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MGSSHHHHHHSSGLVPRGSHMPMAGLLKGLVRQLEQFR VQQQASKMPPKG KSGSGKAGKGGAASGSDSADKKAQGPKGGGNAVKVRHI LCEKHGKIMEAM EKLKSGMRFNEVAAQYSEDKARQGGDLGWMTRGSMVG PFQEAAFALPVSG MDKPVFTDPPVKTKFGYHIIMVEGRK
Predicted molecular weight	19 kDa including tags
Amino acids	1 to 156
Tags	His tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab186986** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE HPLC
Form	Liquid

Preparation and Storage

Stability and Storage	Shipped on Dry Ice. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 7.40
Constituent: 100% PBS

General Info

Function	Isoform 1 is involved as a ribosomal RNA processing factor in ribosome biogenesis. Binds to tightly bent AT-rich stretches of double-stranded DNA. Isoform 2 binds to double-stranded DNA.
Tissue specificity	Isoform 2 is much more stable than isoform 1 (at protein level). Ubiquitous. Isoform 1 and isoform 2 are expressed in kidney, liver, blood vessel, brain, mammary gland, skeletal muscle, small intestine and submandibularis. Isoform 1 transcripts are much more abundant than isoform 2 in each tissue analyzed.
Sequence similarities	Belongs to the ppiC/parvulin rotamase family. PIN4 subfamily. Contains 1 PpiC domain.
Domain	The PPIase domain enhances mitochondrial targeting.
Post-translational modifications	Phosphorylated. Isoform 1 phosphorylation occurs both in the nucleus and the cytoplasm. Isoform 1 phosphorylation at Ser-19 does not affect its PPIase activity but is required for nuclear localization, and the dephosphorylation is a prerequisite for the binding to DNA. The unphosphorylated isoform 1 associates with the pre-rRNP complexes in the nucleus. Isoform 2 is sumoylated by SUMO2 and SUMO3.
Cellular localization	Mitochondrion. Mitochondrion matrix. Imported in a time- and membrane potential-dependent manner to the mitochondrial matrix, but without concomitant processing of the protein. Directed to mitochondria by a novel N-terminal domain that functions as non-cleavable mitochondrial targeting peptide and Nucleus > nucleolus. Cytoplasm > cytoskeleton > spindle. Cytoplasm. Colocalizes in the nucleolus during interphase and on the spindle apparatus during mitosis with NPM1.

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