abcam

Product datasheet

Recombinant Human PSIP1/LEDGF protein ab82126

Description

Product name	Recombinant Human PSIP1/LEDGF protein
Purity	> 95 % SDS-PAGE. Purification by Ion Exchange Chromatography, purity determined by SDS-PAGE
Expression system	Escherichia coli
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Additional sequence information	The amino acid sequence for ab82126 corresponds to isoform 2 of the protein, which is also known as p52 and PSIP2. Accession number NM_021144.

Specifications

Our **Abpromise guarantee** covers the use of **ab82126** 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
Form	Liquid
Additional notes	This product was previously labelled as PSIP1.

Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 7.9 Constituents: 0.75% Potassium chloride, 0.0154% DTT, 0.316% Tris HCl, 0.00584% EDTA, 20% Glycerol (glycerin, glycerine)

General Info

Function	Transcriptional coactivator involved in neuroepithelial stem cell differentiation and neurogenesis. Involved in particular in lens epithelial cell gene regulation and stress responses. May play an important role in lens epithelial to fiber cell terminal differentiation. May play a protective role

	during stress-induced apoptosis. Isoform 2 is a more general and stronger transcriptional coactivator. Isoform 2 may also act as an adapter to coordinate pre-mRNA splicing. Cellular cofactor for lentiviral integration.
Tissue specificity	Widely expressed. Expressed at high level in the thymus. Expressed in fetal and adult brain. Expressed in neurons, but not astrocytes. Markedly elevated in fetal as compared to adult brain. In the adult brain, expressed in the subventricular zone (SVZ), in hippocampus, and undetectable elsewhere. In the fetal brain, expressed in the germinal neuroepithelium and cortical plate regions.
Involvement in disease	Note=A chromosomal aberration involving PSIP1 is associated with pediatric acute myeloid leukemia (AML) with intermediate characteristics between M2-M3 French-American-British (FAB) subtypes. Translocation t(9;11)(p22;p15) with NUP98. The chimeric transcript is an in-frame fusion of NUP98 exon 8 to PSIP1/LEDGF exon 4.
Sequence similarities	Belongs to the HDGF family. Contains 1 PWWP domain.
Domain	Residues 340-417 are necessary and sufficient for the interaction with HIV-1 IN (IBD domain).
Post-translational modifications	Phosphorylated upon DNA damage, probably by ATM or ATR.
Cellular localization	Nucleus. Remains chromatin-associated throughout the cell cycle.