

Anti-PBK1 (RABBIT) Antibody
PBK1 Antibody
Catalog # ASR5403**Specification**

Anti-PBK1 (RABBIT) Antibody - Product Information

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Application	WB, E, IP, I, LCI
Application Note	This affinity purified antibody has been tested for use in ELISA, immunoprecipitation, immunofluorescence microscopy and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 55 kDa in size corresponding to PBK1 by western blotting in the appropriate cell lysate or extract. This antibody is capable of detecting both over-expressed and endogenous PBK1. For immunofluorescence microscopy, fix cells with methanol.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal sequence of human PBK1.
Preservative	0.01% (w/v) Sodium Azide

Anti-PBK1 (RABBIT) Antibody - Additional Information**Gene ID** 26156**Other Names**
26156**Purity**

This product was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody is specific for human PBK1 protein. A BLAST analysis was used to suggest limited cross-reactivity with PBK1 from mouse based on a 75% homology with the immunizing sequence. Cross-reactivity with PBK1 from other sources has not been determined.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended

storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-PBK1 (RABBIT) Antibody - Protein Information

Name RSL1D1

Synonyms CATX11, CSIG {ECO:0000303|PubMed:1867864

Function

Regulates cellular senescence through inhibition of PTEN translation. Acts as a pro-apoptotic regulator in response to DNA damage.

Cellular Location

Nucleus, nucleolus. Note=Colocalizes with ING1 in the nucleolus after UV stress.

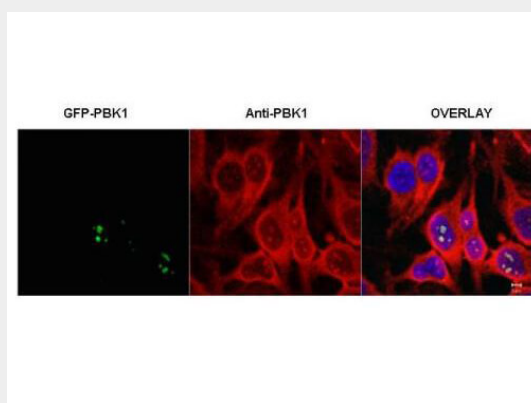
Tissue Location

Expressed at high intensities in the heart, skeletal muscle, and placenta.

Anti-PBK1 (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-PBK1 (RABBIT) Antibody - Images

Immunofluorescence microscopy of HeLa cells transfected with GFP-PBK1. In the overlay, specific

antibody staining is shown to co-localize with recombinant protein. Cells were fixed with methanol prior to staining. Personal communication, J. McNally and D. Stavreva, NCI, Bethesda, MD.

Anti-PBK1 (RABBIT) Antibody - Background

This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI). PBK1 protein (also known as Ribosomal L1 domain-containing protein 1, cellular senescence-inhibited gene protein, and CATX-11) was isolated from highly invasive first trimester trophoblast cells and has been proposed to regulate their naturally occurring invasive behavior (Huch et al., 1998). PBK1 was also found to be over-expressed in non-small-cell lung cancer (NSCLC) cells (Petroziello et al., 2004). A recent study suggests that PBK1 may up-regulate the urokinase-type plasminogen activator (uPA) gene, which plays an important role in cellular matrix degradation and activation of other protease systems involved in cell invasion (Tong et al., 2005). The cellular localization dynamics of PBK1, as well as the data from its yeast homologue (Cic1p/Nsa3p) suggest that PBK1 is essential for ribosome biogenesis (Fatica et al., 2003). Thus, PBK1 could be controlling cell proliferation by regulating the level of ribosome production. It is hypothesized that PBK1 is involved in regulating both, cell proliferation and invasiveness, therefore playing a dual function in cancer cells transformation.