

Product Information

Anti-PSPC1 (C-terminal)

produced in rabbit, affinity isolated antibody

Product Number: **SAB4200067**

Product Description

Anti-PSPC1 (C-terminal) is produced in rabbit using as immunogen a synthetic peptide corresponding to a sequence at the C-terminal of human PSPC1 (GeneID: 55269) conjugated to KLH. The corresponding sequence is identical in mouse and rat. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-PSPC1 (C-terminal) recognizes human PSPC1. The antibody may be used in several immunochemical techniques including immunoblotting (~59 kDa and ~45 kDa bands), immunoprecipitation, and immunofluorescence. Detection of the PSPC1 bands by immunoblotting is specifically inhibited with the immunizing peptide.

PSPC1 (also known as Paraspeckle protein 1, PSP1) is a marker for paraspeckles, which are ribonucleoprotein bodies found in the interchromatin space of mammalian cell nuclei that are often located adjacent to splicing speckles.^{1,2} PSPC1 belongs to the DBHS (*Drosophila melanogaster* behavior, human splicing) protein family that has been implicated in the regulation of nuclear receptors such as the progesterone receptor and the thyroid receptor, and in a wide range of processes such as transcription, splicing, and RNA metabolism.³ Other members of the family are NONO/p54NRB and PSF/SFPQ, that share over 50% sequence identity within two N-terminal RNP-type RNA recognition motifs and a C-terminal coiled-coil domain.^{3,4}

PSPC1 has two isoforms, α and β . It has been shown that PSPC1 forms a heterodimer with NONO/p54NRB in an RNA-dependent manner.⁵

Reagent

Solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody concentration: ~1.0 mg/mL

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at -20 °C. For continuous use, the product may be stored at 2–8 °C for up to one month. For extended storage, freeze in working aliquots at -20 °C. Repeated freezing and thawing, or storage in “frost-free” freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify by centrifugation. Discard working dilutions if not used within 12 hours.

Product Profile

Immunoblotting: a working antibody concentration of 0.5–1 µg/mL is recommended using lysates of HEK-293T cells.

Immunoprecipitation: a working antibody amount of 2.5–5 µg is recommended using lysates of HEK-293T cells.

Immunofluorescence: a working antibody concentration of 1.25–2.5 µg/mL is recommended using paraformaldehyde-fixed HEK-293T cells.

Note: In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

References

1. Fox, A.H. et al., *Curr. Biol.*, **12**, 13-25 (2002).
2. Bond, C.S., and Fox, A.H., *J. Cell Biol.*, **186**, 637-644 (2009).
3. Shav-Tal, Y., and Zipori, D., *FEBS Lett.*, **531**, 109–114 (2002).
4. Dong, B. et al., *Nucl. Acids Res.*, **21**, 4085–4092 (1993).
5. Fox, A.H. et al., *Mol. Biol. Cell*, **16**, 5304-5315 (2005).

VS,SG,TD,KAA,PHC,MAM 01/19-1