

Product Information

Anti-PSPC1 (N-terminal)

produced in rabbit, affinity isolated antibody

Product Number **SAB4200068**

Product Description

Anti-PSPC1 (N-terminal) is developed in rabbit using as immunogen a synthetic peptide corresponding to a sequence at the N-terminal of human PSPC1 (GeneID 55269) conjugated to KLH. The corresponding sequence differs by a single amino acid in mouse and rat. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-PSPC1 (N-terminal) recognizes human PSPC1. The antibody may be used in several immunochemical techniques including immunoblotting (~59 kDa) and immunofluorescence. Detection of the PSPC1 band 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, alpha and beta. It has been shown that PSPC1 forms a heterodimer with NONO/p54NRB in an RNA-dependent manner.⁵

Reagent

Supplied as a 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 is not recommended. Storage in "frost-free" freezers is also not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded 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.

Immunofluorescence: a working antibody concentration of 1.2–2.5 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).

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