

Product Information

Anti-CPSF2 (C-terminal)

produced in rabbit, affinity isolated antibody

Catalog Number **C1872**

Product Description

Anti-CPSF2 (C-terminal) is produced in rabbit using as immunogen a synthetic peptide corresponding to amino acids 718-732 of human CPSF2 (Gene ID: 53981) conjugated to KLH. The corresponding sequence is identical in mouse. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-CPSF2 (C-terminal) recognizes human CPSF2 (also known as Cleavage and polyadenylation specificity factor 100 kDa subunit or CPSF-100 kDa subunit). The antibody may be used in several immunochemical techniques including immunoblotting (~100 kDa), and immunoprecipitation. Detection of the CPSF2 band by immunoblotting is specifically inhibited with the immunizing peptide.

mRNA precursors are processed at the 3'-ends in a two-step reaction: endonucleolytic cleavage at the poly(A) site followed by the addition of adenylate residues to form a poly(A) tail. The mammalian mRNA 3' ends processing complex contains several sub-complexes. These include the cleavage-polyadenylation specificity factor (CPSF), which recognizes the nearly ubiquitous AAUAAA signal; cleavage stimulatory factor (CstF), which interacts with a less-conserved G/U-rich sequence situated downstream of the cleavage site; cleavage factors I and II (CFI and CFII) and finally poly(A) polymerase (PAP). CPSF is a large protein complex containing subunits of 160, 100, 73, and 30 kDa, referred to as CPSF1 (CPSF-160), CPSF2 (CPSF-100), CPSF3 (CPSF-73), and CPSF4 (CPSF-30), respectively, and hFip, all required for efficient cleavage and polyadenylation of pre-mRNAs.¹⁻² The function of CPSF2 in 3'-end processing is currently not known.

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

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store 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 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 2-4 µg/mL is recommended using K562 cell lysates.

Immunoprecipitation: a working antibody amount of 2-5 µg is recommended using A20 cell lysates.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

References

1. Zhao, J., et al., *Microbiol. Mol. Biol. Rev.*, **63**, 405-445 (1999).
2. Mandel, C.R., et al., *Cell. Mol. Life Sci.*, **65**, 1099-1122 (2008).

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