

Product Information

Anti-CPSF6 (N-terminal)

produced in rabbit, affinity isolated antibody

Catalog Number **SAB4200259**

Product Description

Anti- CPSF6 (N-terminal) is produced in rabbit using as immunogen a synthetic peptide corresponding to the N- terminal region of human CPSF6 (GenelD: 11052), 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- CPSF6 (N-terminal) recognizes human CPSF6. The antibody may be used in various immunochemical techniques including immunoblotting (~68 kDa), immunoprecipitation and immunofluorescence. Detection of the CPSF6 band by immunoblotting is specifically inhibited with the immunizing peptide.

The mammalian mRNAs 3'-end processing complex contains several sub-complexes, including cleavage and polyadenylation specificity factor (CPSF), cleavage stimulation factor (CstF), cleavage factor I (CF I_m), and cleavage factor II (CF II_m). Other proteins involved are poly(A) polymerase (PAP), poly(A) binding protein (PABP), symplekin, and PolII CTD which also belong to this machinery.¹⁻²

CF I_m is required for cleavage *in vitro*, and appears to be unique to higher eukaryotes. Interaction of CF I_m with the RNA is one of the earliest steps in the assembly of the cleavage/ polyadenylation complex. CF I_m functions as a heterodimer that consists of a 25 kDa subunit and one of the 59 kDa, 68 kDa or 72 kDa subunits.³ CPSF6 is the 68 kDa subunit. It contains an N-terminal RNP-type RNA binding domain (RBD), which is necessary for binding to the 25 kDa subunit. The C-terminal region of CPSF6 is rich in RS, RD and RE repeats similar to pre-mRNA splicing SR proteins, and mediates the interaction *in vitro* with shuttling SR proteins.⁴

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

Store at -20°C. For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. 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 0.5-1.0 µg/mL is recommended using lysates of MCF7 cells.

Immunoprecipitation: a working antibody amount of 5-10 µg is recommended using HEK-293T cell lysates.

Immunofluorescence: a working concentration of 1.25-2.5 µg/mL is recommended using paraformaldehyde fixed HeLa cells.

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).
3. Ruegseger, U., et al., *J. Biol. Chem.*, **271**, 6107-6113 (1996).
4. Dettwiler, S., et al., *J. Biol. Chem.*, **279**, 35788-35797 (2004).

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