

MEPCE Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57251**Specification****MEPCE Polyclonal Antibody - Product Information**

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q7L2J0
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	74 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human MEPCE
Epitope Specificity	181-280/689
Isotype	IgG
Purity	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the methyltransferase superfamily. Contains 1 Bin3-type SAM domain.
SUBUNIT	Component of the 7SK snRNP complex at least composed of P-TEFb (composed of CDK9 and CCNT1/cyclin-T1), HEXIM1, HEXIM2, MEPCE/BCDIN3, SART3 proteins and 7SK and U6 snRNAs.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

MEPCE belongs to the methyltransferase superfamily and contains one BIN3 domain. It is an S-adenosyl-L-methionine-dependent methyltransferase that adds a methylphosphate cap at the 5'-end of 7SK snRNA, leading to stabilize it. MEPCE is expressed in chronic myeloid leukemia cells, adrenal gland, brain, cerebellum, kidney, lung, mammary gland and testis. It is weakly or not expressed in other tissues.

MEPCE Polyclonal Antibody - Additional Information**Gene ID** 56257**Other Names**

7SK snRNA methylphosphate capping enzyme, MePCE, 2.1.1.-, Bicoid-interacting protein 3 homolog, Bin3 homolog, MEPCE {ECO:0000303|PubMed:30559425, ECO:0000312|HGNC:HGNC:20247}

Target/Specificity

Expressed in chronic myeloid leukemia cells, adrenal gland, brain, cerebellum, kidney, lung, mammary gland and testis. Weakly or not expressed in other tissues.

Dilution

IHC-P~N/A
IHC-F~N/A
IF~1:50~200
ICC~N/A
E~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glycine

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

MEPCE Polyclonal Antibody - Protein Information

Name MEPCE {ECO:0000303|PubMed:30559425, ECO:0000312|HGNC:HGNC:20247}

Function

S-adenosyl-L-methionine-dependent methyltransferase that adds a methylphosphate cap at the 5'-end of 7SK snRNA (7SK RNA), leading to stabilize it (PubMed:17643375, PubMed:19906723, PubMed:30559425). Also has a non-enzymatic function as part of the 7SK RNP complex: the 7SK RNP complex sequesters the positive transcription elongation factor b (P-TEFb) in a large inactive 7SK RNP complex preventing RNA polymerase II phosphorylation and subsequent transcriptional elongation (PubMed:17643375). The 7SK RNP complex also promotes snRNA gene transcription by RNA polymerase II via interaction with the little elongation complex (LEC) (PubMed:28254838). In the 7SK RNP complex, MEPCE is required to stabilize 7SK RNA and facilitate the assembly of 7SK RNP complex (PubMed:19906723, PubMed:38100593). MEPCE has a non-enzymatic function in the 7SK RNP complex; interaction with LARP7 within the 7SK RNP complex occluding its catalytic center (PubMed:19906723). Also required for stability of U6 snRNAs (PubMed:38100593).

Cellular Location

Nucleus.

Tissue Location

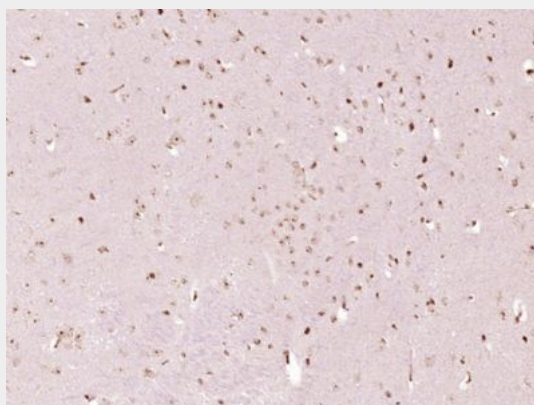
Expressed in chronic myeloid leukemia cells, adrenal gland, brain, cerebellum, kidney, lung, mammary gland and testis (PubMed:12358911). Weakly or not expressed in other tissues (PubMed:12358911).

MEPCE Polyclonal 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](#)

MEPCE Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MEPCE) Polyclonal Antibody, Unconjugated (bs-18788R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.