

ERI1 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16515A**Specification**

ERI1 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	Q8IV48
Other Accession	Q5FVR4 , Q7TMF2 , NP_699163.2
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	40064
Antigen Region	80-109

ERI1 Antibody (N-term) - Additional Information**Gene ID** 90459**Other Names**

3'-5' exoribonuclease 1, 31--, 3'-5' exonuclease ERI1, Eri-1 homolog, Histone mRNA 3'-end-specific exoribonuclease, Histone mRNA 3'-exonuclease 1, Protein 3'hExo, HEXO, ERI1, 3'EXO, THEX1

Target/Specificity

This ERI1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 80-109 amino acids from the N-terminal region of human ERI1.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ERI1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ERI1 Antibody (N-term) - Protein Information**Name** ERI1

Synonyms 3'EXO, THEX1

Function RNA exonuclease that binds to the 3'-end of histone mRNAs and degrades them, suggesting that it plays an essential role in histone mRNA decay after replication (PubMed:[14536070](#), PubMed:[16912046](#), PubMed:[17135487](#)). A 2' and 3'-hydroxyl groups at the last nucleotide of the histone 3'-end is required for efficient degradation of RNA substrates (PubMed:[14536070](#), PubMed:[16912046](#), PubMed:[17135487](#)). Also able to degrade the 3'-overhangs of short interfering RNAs (siRNAs) in vitro, suggesting a possible role as regulator of RNA interference (RNAi) (PubMed:[14961122](#)). Required for binding the 5'-ACCCA-3' sequence present in stem-loop structure (PubMed:[14536070](#), PubMed:[16912046](#)). Able to bind other mRNAs (PubMed:[14536070](#), PubMed:[16912046](#)). Required for 5.8S rRNA 3'-end processing (By similarity). Also binds to 5.8S ribosomal RNA (By similarity). Binds with high affinity to the stem-loop structure of replication-dependent histone pre-mRNAs (PubMed:[14536070](#), PubMed:[17135487](#), PubMed:[16912046](#)). In vitro, does not have sequence specificity (PubMed:[17135487](#)). In vitro, has weak DNA exonuclease activity (PubMed:[17135487](#)). In vitro, shows biphasic kinetics such that there is rapid hydrolysis of the last three unpaired RNA nucleotides in the 3' flanking sequence followed by a much slower cleavage through the stem that occurs over a longer incubation period in the order of hours (PubMed:[17135487](#)).

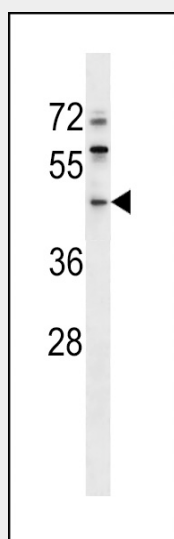
Cellular Location

Cytoplasm. Nucleus. Nucleus, nucleolus

ERI1 Antibody (N-term) - 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](#)

ERI1 Antibody (N-term) - Images

ERI1 Antibody (N-term) (Cat. #AP16515a) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the ERI1 antibody detected the ERI1 protein (arrow).

ERI1 Antibody (N-term) - Background

RNA exonuclease that binds to the 3'-end of histone mRNAs and degrades them, suggesting that it plays an essential role in histone mRNA decay after replication. A 2' and 3'-hydroxyl groups at the last nucleotide of the histone 3'-end is required for efficient degradation of RNA substrates. Also able to degrade the 3'-overhangs of short interfering RNAs (siRNAs) in vitro, suggesting a possible role as regulator of RNA interference (RNAi). Requires for binding the 5'-ACCCA-3' sequence present in stem-loop structure. Able to bind other mRNAs. Required for 5.8S rRNA 3'-end processing. Also binds to 5.8s ribosomal RNA. Binds with high affinity to the stem-loop structure of replication-dependent histone pre-mRNAs.

ERI1 Antibody (N-term) - References

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Mullen, T.E., et al. Genes Dev. 22(1):50-65(2008)
Kupsco, J.M., et al. RNA 12(12):2103-2117(2006)
Yang, X.C., et al. J. Biol. Chem. 281(41):30447-30454(2006)
Cheng, Y., et al. J. Mol. Biol. 343(2):305-312(2004)