10320 Camino Santa Fe, Suite G
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ERI1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50075

Specification

ERI1 Antibody - Product Information

Application	**WB**
Primary Accession	Q8IV48
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**40 KDa**
Antigen Region	**276-305**

ERI1 Antibody - 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

Dilution
WB~~ 1:1000

Format
Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions
-20℃

ERI1 Antibody - 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:<a href="http://www.uniprot.org/citations/17135487"

target="_blank">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 39 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

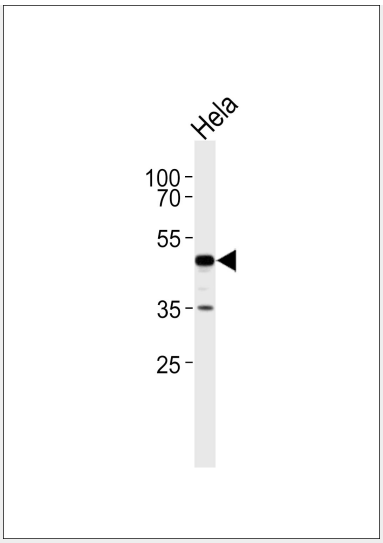
ERI1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ERI1 Antibody - Images

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Western blot analysis of lysate from Hela cell line,using ERI1 Antibody(C21254). C21254 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysate at 35ug.

ERI1 Antibody - 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 - References

Dominski Z.,et al.Mol. Cell 12:295-305(2003).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
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Yang X.-C.,et al.J. Biol. Chem. 281:30447-30454(2006).