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INTS1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP1974a

Specification

INTS1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q8N201

INTS1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 26173

Other Names
Integrator complex subunit 1, Int1, INTS1, KIAA1440

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP1974a was selected from the N-term region of human INTS1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

INTS1 Antibody (N-term) Blocking Peptide - Protein Information

Name INTS1 {ECO:0000303|PubMed:29471365, ECO:0000312|HGNC:HGNC:24555}

Function
Component of the integrator complex, a multiprotein complex that terminates RNA polymerase II (Pol II) transcription in the promoter-proximal region of genes (PubMed:25201415, PubMed:33243860, PubMed:38570683). The integrator complex provides a quality checkpoint during transcription elongation by driving premature transcription termination of transcripts that are unfavorably configured for transcriptional elongation: the complex terminates transcription by (1) catalyzing dephosphorylation of the C-terminal domain (CTD) of Pol II subunit POLR2A/RPB1 and SUPT5H/SPT5, (2) degrading the exiting nascent RNA transcript via endonuclease activity and (3) promoting the release of Pol II from bound DNA (PubMed:33243860). The

integrator complex is also involved in terminating the synthesis of non-coding Pol II transcripts, such as enhancer RNAs (eRNAs), small nuclear RNAs (snRNAs), telomerase RNAs and long non-coding RNAs (lncRNAs) (PubMed:16239144, PubMed:26308897, PubMed:30737432). Within the integrator complex, INTS1 is involved in the post-termination step: INTS1 displaces INTS3 and the SOSS factors, allowing the integrator complex to return to the closed conformation, ready to bind to the paused elongation complex for another termination cycle (PubMed:38570683). Mediates recruitment of cytoplasmic dynein to the nuclear envelope, probably as component of the integrator complex (PubMed:23904267).

Cellular Location
Nucleus. Nucleus membrane; Single- pass membrane protein

INTS1 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

INTS1 Antibody (N-term) Blocking Peptide - Images

INTS1 Antibody (N-term) Blocking Peptide - Background

INTS1 is a component of the Integrator complex, a complex involved in the small nuclear RNAs (snRNA) U1 and U2 transcription and in their 3' box-dependent processing. The Integrator complex is associated with the C-terminal domain (CTD) of RNA polymerase II largest subunit (POLR2A) and is recruited to the U1 and U2 snRNAs genes.

INTS1 Antibody (N-term) Blocking Peptide - References

Baillat, D., et al. Cell. 2005 Oct 21;123(2):265-76.