

# INTS1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12256A

### **Specification**

## INTS1 Antibody (N-term) - Product Information

Application WB,E
Primary Accession Q8N201

Other Accession <u>Q6P4S8</u>, <u>NP\_001073922.2</u>

Reactivity
Predicted
Mouse
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
Human
Mouse
Rabbit
Polyclonal
Rabbit IgG
113-142

## INTS1 Antibody (N-term) - Additional Information

### **Gene ID 26173**

#### **Other Names**

Integrator complex subunit 1, Int1, INTS1, KIAA1440

## Target/Specificity

This INTS1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 113-142 amino acids from the N-terminal region of human INTS1.

### **Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

#### **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**

INTS1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## INTS1 Antibody (N-term) - 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: <u>16239144</u>, PubMed: <u>26308897</u>, PubMed: <u>30737432</u>). 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**

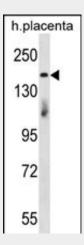
Nucleus. Nucleus membrane; Single- pass membrane protein

#### INTS1 Antibody (N-term) - Protocols

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

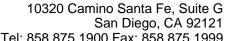
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## INTS1 Antibody (N-term) - Images



INTS1 Antibody (Cat. #AP12256a) western blot analysis in human placenta tissue lysates (35ug/lane). This demonstrates the INTS1 antibody detected the INTS1 protein (arrow).

#### INTS1 Antibody (N-term) - Background





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INTS1 is a subunit of the Integrator complex, which associates with the C-terminal domain of RNA polymerase II large subunit (POLR2A; MIM 180660) and mediates 3-prime end processing of small nuclear RNAs U1 (RNU1; MIM 180680) and U2 (RNU2; MIM 180690) (Baillat et al., 2005 [PubMed 16239144]).

# INTS1 Antibody (N-term) - References

Nusbaum, C., et al. Nature 439(7074):331-335(2006) Baillat, D., et al. Cell 123(2):265-276(2005) Clark, H.F., et al. Genome Res. 13(10):2265-2270(2003)