

INTS3 Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22240b

Product Information

ApplicationWB, EPrimary AccessionQ68E01Other AccessionQ7TPD0

Reactivity Human, Mouse

HostRabbitClonalitypolyclonalIsotypeRabbit IgGClone NamesRB56745Calculated MW118070

Additional Information

Gene ID 65123

Other Names Integrator complex subunit 3, Int3, SOSS complex subunit A, Sensor of

single-strand DNA complex subunit A, SOSS-A, Sensor of ssDNA subunit A,

INTS3, C1orf193, C1orf60

Target/SpecificityThis INTS3 antibody is generated from a rabbit immunized with a KLH

conjugated synthetic peptide between 1000-1034 amino acids from human

INTS3.

Dilution WB~~1:2000 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 INTS3 Antibody (C-Term) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name INTS3 {ECO:0000303|PubMed:29471365, ECO:0000312|HGNC:HGNC:26153}

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:<u>38570683</u>). 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:38570683). 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 (IncRNAs) (PubMed:16239144). Within the integrator complex, INTS3 is involved in the post-termination step: INTS3 binds INTS7 in the open conformation of integrator complex and prevents the rebinding of Pol II to the integrator after 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. Cytoplasm. Note=Localizes to nuclear foci following DNA damage.

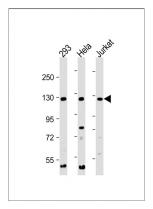
Background

Component of the Integrator complex. The Integrator complex is 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.

References

Bechtel S., et al.BMC Genomics 8:399-399(2007).
Ota T., et al.Nat. Genet. 36:40-45(2004).
Gregory S.G., et al.Nature 441:315-321(2006).
Mural R.J., et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Baillat D., et al.Cell 123:265-276(2005).

Images



All lanes: Anti-INTS3 Antibody (C-Term) at 1:2000 dilution Lane 1: 293 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 118 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.