

INTS3 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22238c

Specification

INTS3 Antibody (Center) - Product Information

Application WB, FC,E Primary Accession O68E01

Other Accession
Reactivity
Predicted

OTTPD0, Q5RE70
Human, Mouse
Mouse

Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 118070

INTS3 Antibody (Center) - 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, Clorf193, Clorf60

Target/Specificity

This INTS3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 518-551 amino acids from the Central region of human INTS3.

Dilution

WB~~1:2000

FC~~1:25

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 (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

INTS3 Antibody (Center) - 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: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: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

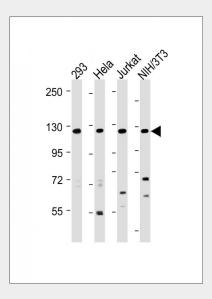
Nucleus. Cytoplasm. Note=Localizes to nuclear foci following DNA damage.

INTS3 Antibody (Center) - 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

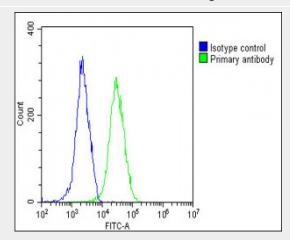
INTS3 Antibody (Center) - Images



All lanes : Anti-INTS3 Antibody (Center) at 1:2000 dilution Lane 1: 293 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: Jurkat whole cell lysate Lane 4: NIH/3T3 whole cell lysate Lysates/proteins at 20 μ g 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.



Overlay histogram showing Hela cells stained with AP22238c(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22238c, 1:25 dilution) for 60 min at 37 $^{\circ}$ C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OE188374) at 1/200 dilution for 40 min at 37 $^{\circ}$ C. Isotype control antibody (blue line) was rabbit IgG1 (1 μ g/1x10 $^{\circ}$ 6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

INTS3 Antibody (Center) - 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.

INTS3 Antibody (Center) - 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).