

INTS3 Rabbit pAb

Catalog # AP98171

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q68E01
Other Accession	Q68E01
Reactivity	Human
Predicted	Pig, Rabbit, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	118070
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human INTS3
Epitope Specificity	901-1043/1043
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the Integrator subunit 3 family.
SUBUNIT	Belongs to the multiprotein complex Integrator, at least composed of INTS1, INTS2, INTS3, INTS4, INTS5, INTS6, INTS7, INTS8, INTS9/RC74, INTS10, CPSF3L/INTS11 and INTS12. Component of the SOSS complex, composed of SOSS-B (SOSS-B1/OBFC2B or SOSS-B2/OBFC2A), SOSS-A/INTS3 and SOSS-C/C9orf80. SOSS complexes containing SOSS-B1/OBFC2B are more abundant than complexes containing SOSS-B2/OBFC2A. Interacts with SOSS-B1/OBFC2B, SOSS-B2/OBFC2A and SOSS-C/C9orf80; the interaction is direct. Interacts with NBN/NBS1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	RNA polymerase II (Pol II) is an enzyme that is composed of twelve subunits and is responsible for the transcription of protein-coding genes. Transcription initiation requires Pol II-mediated recruitment of transcription machinery to a target promoter, thereby allowing transcription to begin. The integrator complex is a multi-protein complex that associates with the C-terminal domain of Pol II and is involved in small nuclear RNA (snRNA) transcription and 3'-end processing. INTS3 (integrator complex subunit 3), also known as INT3 or SOSS-A, is a 1,043 amino acid nuclear protein and is a subunit of the Integrator complex, which associates with the C-terminal domain of RNA polymerase II large subunit and mediates 3-prime end processing of small nuclear RNAs U1 and U2. Expressed in the nucleus, INTS3 exists as four alternatively spliced isoforms and is encoded by a gene located on human chromosome 1q21.3.

Additional Information

Gene ID 65123

Other Names	C1orf193; C1orf60; INT3; SOSS-A; SOSSA; INT3_HUMAN; INTS3; SOSS complex subunit A; Sensor of single-strand DNA complex subunit A (SOSS-A Sensor of ssDNA subunit A); INT3_MOUSE; integrator complex subunit 3; chromosome 1 open reading frame 60; sensor of single-strand DNA complex subunit A
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	INTS3 {ECO:0000303 PubMed:29471365, ECO:0000312 HGNC:HGNC:26153}
Function	<p>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 (lncRNAs) (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).</p>
Cellular Location	Nucleus. Cytoplasm. Note=Localizes to nuclear foci following DNA damage.

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