

INTS6 Blocking Peptide (N-Term) Synthetic peptide Catalog # BP21956a

Specification

INTS6 Blocking Peptide (N-Term) - Product Information

Primary Accession Other Accession <u>Q9UL03</u> <u>O5JSJ4, Q8BND4, Q2TAF4, Q5U4W6, Q7SYD9,</u> <u>Q6PCM2</u>

INTS6 Blocking Peptide (N-Term) - Additional Information

Gene ID 26512

Other Names Integrator complex subunit 6, Int6, DBI-1, Protein DDX26, Protein deleted in cancer 1, DICE1, INTS6, DBI1, DDX26, DDX26A

Target/Specificity The synthetic peptide sequence is selected from aa 155-167 of HUMAN INTS6

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.

INTS6 Blocking Peptide (N-Term) - Protein Information

Name INTS6 {ECO:0000303|PubMed:33243860, ECO:0000312|HGNC:HGNC:14879}

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:33243860, PubMed:34004147). 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, PubMed:34004147, PubMed:<a href="http://www.uniprot.org/citations/34004147"



href="http://www.uniprot.org/citations/38570683" target="_blank">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, INTS6 acts as a molecular adapter that promotes assembly of protein phosphatase 2A (PP2A) subunits to the integrator core complex, promoting recruitment of PP2A to transcription pause-release checkpoint (PubMed:33243860, PubMed:33243860, PubMed:33243860, PubMed:33243860, PubMed:33243800, PubMed:23904267). May have a tumor suppressor role; an ectopic expression suppressing tumor cell growth (PubMed:15254679, PubMed:16239144).

Cellular Location Nucleus. Chromosome Note=Associates with chromatin and transcription pause-release checkpoint.

Tissue Location

Widely expressed. Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas

INTS6 Blocking Peptide (N-Term) - Protocols

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

Blocking Peptides

INTS6 Blocking Peptide (N-Term) - Images

INTS6 Blocking Peptide (N-Term) - Background

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. May have a tumor suppressor role; an ectopic expression suppressing tumor cell growth.

INTS6 Blocking Peptide (N-Term) - References

Wieland I., et al.Oncogene 18:4530-4537(1999). Bechtel S., et al.BMC Genomics 8:399-399(2007). Dunham A., et al.Nature 428:522-528(2004). Hoff H.B. III, et al.Submitted (APR-1999) to the EMBL/GenBank/DDBJ databases. Wieland I., et al.Oncol. Res. 12:491-500(2001).