

# **INTS4 Antibody (Center) Blocking Peptide**

Synthetic peptide Catalog # BP1958c

### **Specification**

# **INTS4 Antibody (Center) Blocking Peptide - Product Information**

**Primary Accession** 

**Q96HW7** 

# INTS4 Antibody (Center) Blocking Peptide - Additional Information

**Gene ID 92105** 

#### **Other Names**

Integrator complex subunit 4, Int4, INTS4

### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP1958c>AP1958c</a> was selected from the Center region of human INTS4. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

### **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.

# **INTS4 Antibody (Center) Blocking Peptide - Protein Information**

Name INTS4 {ECO:0000303|PubMed:29471365, ECO:0000303|PubMed:33243860}

### **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:<a href="http://www.uniprot.org/citations/29471365" target="\_blank">29471365</a>, PubMed:<a href="http://www.uniprot.org/citations/33243860" target="\_blank">33243860</a>, PubMed:<a href="http://www.uniprot.org/citations/33548203" target="\_blank">33548203</a>, PubMed:<a href="http://www.uniprot.org/citations/38570683" target="\_blank">38570683</a>, PubMed:<a href="http://www.uniprot.org/citations/38570683" target="\_blank">38570683</a>). 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:<a



href="http://www.uniprot.org/citations/33243860" target="\_blank">33243860</a>, PubMed:<a href="http://www.uniprot.org/citations/38570683" target="\_blank">38570683</a>). 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:<a href="http://www.uniprot.org/citations/16239144" target="\_blank">16239144</a>). Within the integrator complex, INTS4 acts as an scaffold that links INTS9 and INTS11 (PubMed:<a href="http://www.uniprot.org/citations/29471365" target="\_blank">29471365</a>, PubMed:<a href="http://www.uniprot.org/citations/33548203" target="\_blank">33548203</a>). Mediates recruitment of cytoplasmic dynein to the nuclear envelope, probably as component of the integrator complex (PubMed:<a href="http://www.uniprot.org/citations/23904267" target="\_blank">23904267</a>).

**Cellular Location** Nucleus. Cytoplasm

# INTS4 Antibody (Center) Blocking Peptide - Protocols

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

Blocking Peptides

INTS4 Antibody (Center) Blocking Peptide - Images

INTS4 Antibody (Center) Blocking Peptide - Background

INTS4 is a 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.

### INTS4 Antibody (Center) Blocking Peptide - References

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002).