

**WHSC2 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2301a**

**Specification**

**WHSC2 Antibody - Product Information**

Application	E, WB, IF, FC, IHC
Primary Accession	<a href="#">O9H3P2</a>
Reactivity	Human, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Calculated MW	57.3kDa KDa

**Description**

This gene is expressed ubiquitously with higher levels in fetal than in adult tissues. It encodes a protein sharing 93% sequence identity with the mouse protein. Wolf-Hirschhorn syndrome (WHS) is a malformation syndrome associated with a hemizygous deletion of the distal short arm of chromosome 4. This gene is mapped to the 165 kb WHS critical region, and may play a role in the phenotype of the WHS or Pitt-Rogers-Danks syndrome. The encoded protein is found to be capable of reacting with HLA-A2-restricted and tumor-specific cytotoxic T lymphocytes, suggesting a target for use in specific immunotherapy for a large number of cancer patients. This protein has also been shown to be a member of the NELF (negative elongation factor) protein complex that participates in the regulation of RNA polymerase II transcription elongation.

**Immunogen**

Purified recombinant fragment of human WHSC2 (AA: 280-511) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**WHSC2 Antibody - Additional Information**

**Gene ID** 7469

**Other Names**

Negative elongation factor A, NELF-A, Wolf-Hirschhorn syndrome candidate 2 protein, NELFA, WHSC2

**Dilution**

E~~1/10000  
WB~~1/500 - 1/2000  
IF~~1/200 - 1/1000  
FC~~1/200 - 1/400  
IHC~~1/200 - 1/1000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## Precautions

WHSC2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## WHSC2 Antibody - Protein Information

**Name** NELFA

**Synonyms** WHSC2

### Function

Essential component of the NELF complex, a complex that negatively regulates the elongation of transcription by RNA polymerase II. The NELF complex, which acts via an association with the DSIF complex and causes transcriptional pausing, is counteracted by the P-TEFb kinase complex.

### Cellular Location

Nucleus.

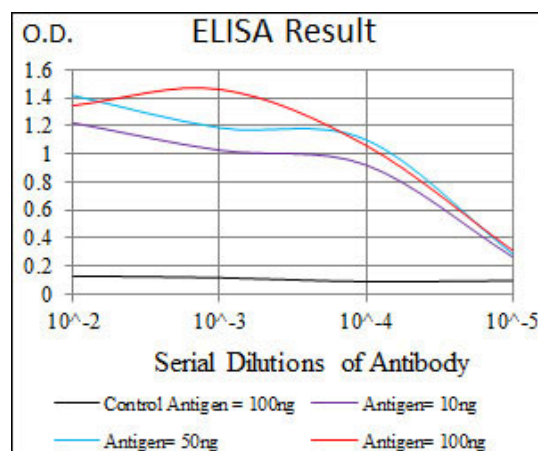
### Tissue Location

Ubiquitous. Expressed in heart, brain, placenta, liver, skeletal muscle, kidney and pancreas. Expressed at lower level in adult lung. Expressed in fetal brain, lung, liver and kidney

## WHSC2 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



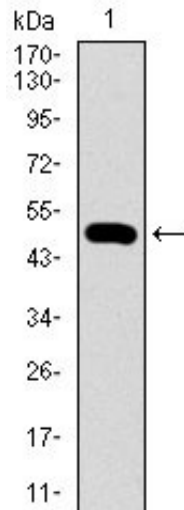


Figure 1: Western blot analysis using WHSC2 mAb against human WHSC2 recombinant protein. (Expected MW is 50.2 kDa)

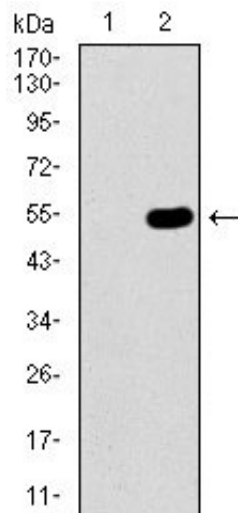


Figure 2: Western blot analysis using WHSC2 mAb against HEK293 (1) and WHSC2 (AA: 280-511)-hlgGfc transfected HEK293 (2) cell lysate.

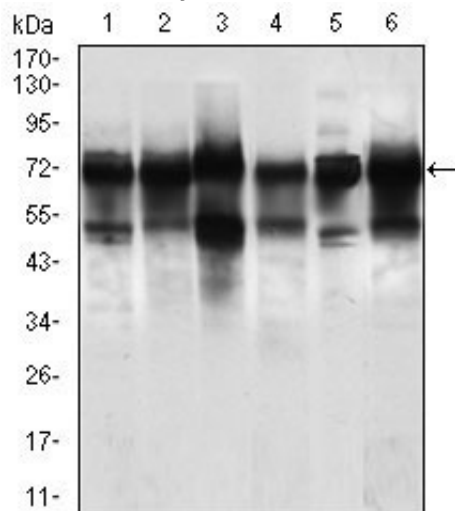


Figure 3: Western blot analysis using WHSC2 mouse mAb against Jurkat (1), HeLa (2), HEK293 (3), A549 (5), SPC-A-1 (6) cell lysate, and Rat brain (4) tissue lysate.

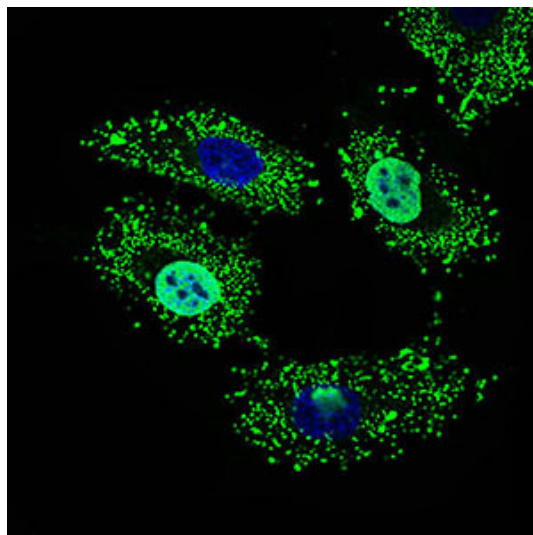


Figure 4: Immunofluorescence analysis of HeLa cells using WHSC2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

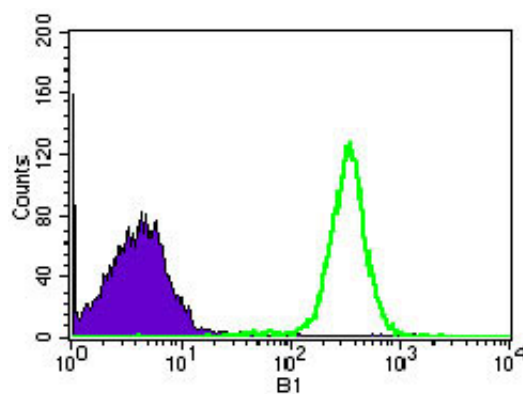


Figure 5: Flow cytometric analysis of HEK293 cells using WHSC2 mouse mAb (green) and negative control (purple).

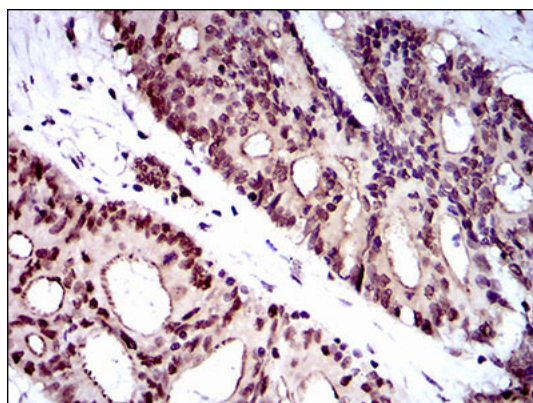


Figure 6: Immunohistochemical analysis of paraffin-embedded colon cancer tissues using WHSC2 mouse mAb with DAB staining.

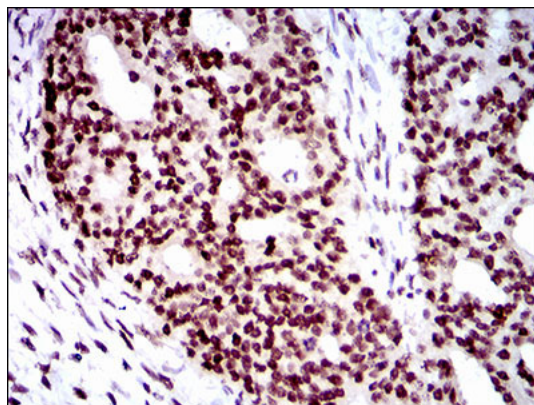


Figure 7: Immunohistochemical analysis of paraffin-embedded ovarian cancer tissues using WHSC2 mouse mAb with DAB staining.

### **WHSC2 Antibody - References**

1.Hum Mol Genet. 2012 May 15;21(10):2181-93. 2.Exp Cell Res. 2009 Jun 10;315(10):1693-705.