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WHSC2 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2301a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	Q9H3P2
Reactivity	Human, Rat
Host	Mouse
Clonality	Monoclonal
Clone Names	6B11H8
Isotype	IgG2b
Calculated MW	57277
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

Additional Information

Gene ID	7469
Other Names	Negative elongation factor A, NELF-A, Wolf-Hirschhorn syndrome candidate 2 protein, NELFA, WHSC2
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000
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.

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

References

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

Images

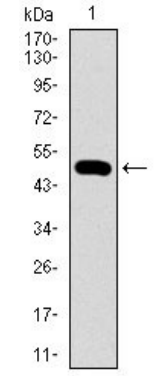


Figure 1: Western blot analysis using WHSC2 mAb against human WHSC2 recombinant protein. (Expected MW is 50.2 kDa)

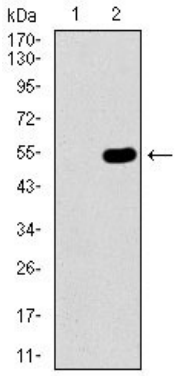
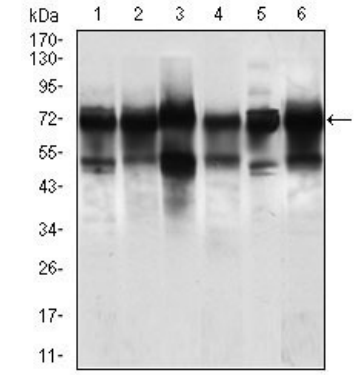


Figure 2: Western blot analysis using WHSC2 mAb against HEK293 (1) and WHSC2 (AA: 280-511)-hIgGFc transfected HEK293 (2) cell lysate.

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.



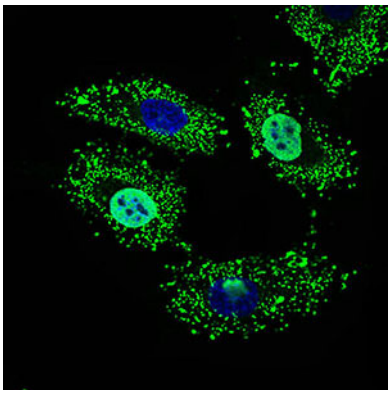


Figure 4: Immunofluorescence analysis of HeLa cells using WHSC2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

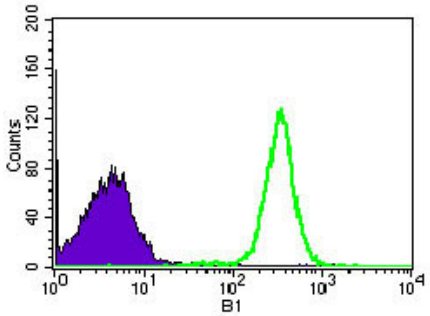


Figure 5: Flow cytometric analysis of HEK293 cells using WHSC2 mouse mAb (green) and negative control (purple).

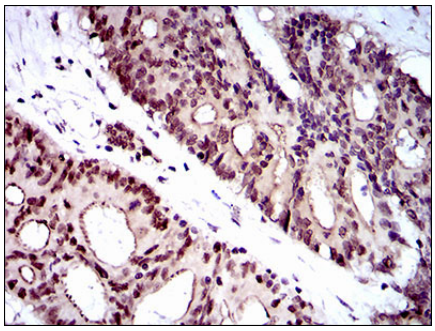


Figure 6: Immunohistochemical analysis of paraffin-embedded colon cancer tissues using WHSC2 mouse mAb with DAB staining.