

### SEPT9 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6215a

## **Specification**

# SEPT9 Antibody (C-term) - Product Information

**Application** WB, IHC-P, FC,E Primary Accession **09UHD8** Other Accession NP 006631.2 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG **Antigen Region** 557-586

## SEPT9 Antibody (C-term) - Additional Information

### **Gene ID** 10801

## **Other Names**

Septin-9, MLL septin-like fusion protein MSF-A, MLL septin-like fusion protein, Ovarian/Breast septin, Ov/Br septin, Septin D1, SEPT9, KIAA0991, MSF

### Target/Specificity

This SEPT9 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 57-85 amino acids from the C-terminal region of human SEPT9.

# **Dilution**

WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

#### Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

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

#### **Precautions**

SEPT9 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# SEPT9 Antibody (C-term) - Protein Information

Name SEPTIN9 (HGNC:7323)



# Synonyms KIAA0991, MSF, SEPT9

**Function** Filament-forming cytoskeletal GTPase (By similarity). May play a role in cytokinesis (Potential). May play a role in the internalization of 2 intracellular microbial pathogens, Listeria monocytogenes and Shigella flexneri.

#### **Cellular Location**

Cytoplasm, cytoskeleton. Note=In an epithelial cell line, concentrates at cell-cell contact areas. After TGF-beta1 treatment and induction of epithelial to mesenchymal transition, colocalizes partly with actin stress fibers. During bacterial infection, displays a collar shape structure next to actin at the pole of invading bacteria

#### **Tissue Location**

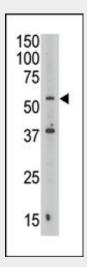
Widely expressed. Isoforms are differentially expressed in testes, kidney, liver heart, spleen, brain, peripheral blood leukocytes, skeletal muscle and kidney. Specific isoforms appear to demonstrate tissue specificity. Isoform 5 is the most highly expressed in fetal tissue. Isoform 1 is detected in all tissues except the brain and thymus, while isoform 2, isoform 3, and isoform 4 are detected at low levels in approximately half of the fetal tissues

### SEPT9 Antibody (C-term) - Protocols

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

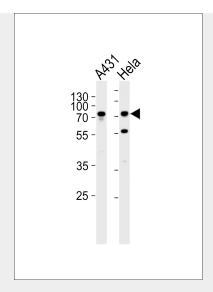
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## SEPT9 Antibody (C-term) - Images

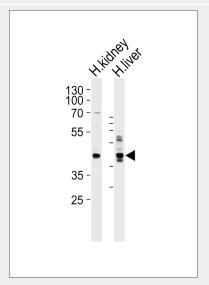


The anti-SEPT9 Pab (Cat. #AP6215a) is used in Western blot to detect SEPT9 in Jurkat cell lysate.



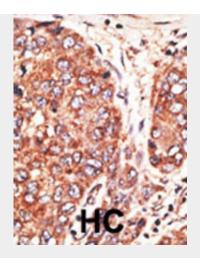


Western blot analysis of lysates from A431, Hela cell line (from left to right), using SEPT9 Antibody (C-term)(Cat. #AP6215a). AP6215a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

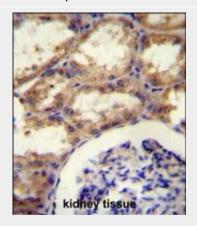


Western blot analysis of lysates from human kidney and liver tissue lysate (from left to right), using SEPT9 Antibody (C-term)(Cat. #AP6215a). AP6215a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

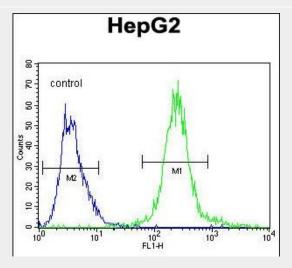




Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



SEPT9 Antibody (A555) (Cat. #AP6215a)immunohistochemistry analysis in formalin fixed and paraffin embedded kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of SEPT9 Antibody (A555) for immunohistochemistry. Clinical relevance has not been evaluated.



SEPT9 Antibody (A555) (Cat. #AP6215a) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



## SEPT9 Antibody (C-term) - Background

The maf oncogene was identified by structural analysis of the AS42 avian transforming retrovirus genome. The Maf family is divided into two subclasses, large Mafs (vMaf, cMaf, MafB and Nrl) and small Mafs (MafF, MafK, and MafG). Both subclasses contain leucinezipper motifs, which allow homodimerization as well as heterodimerization with a variety of other bZip transcription factors. Large Mafs also contain an acidic transactivation domain absent in the small Maf proteins. Although they do not possess inherent transactivation activity, small Maf proteins can act as positive regulators of transcription by targeting transcriptionally active dimerization partners to specific DNA regulatory elements. Conversely, small Mafs can act also as negative regulators of transcription by recruiting transcriptional repressors or by forming homodimers that can replace active dimers. Human MafF was isolated in a yeast one-hybrid system from a human myometrium cDNA library. Human MAFF encodes a 164 amino acids proten. Like other small MAFF proteins, it contains an extended leucine zipper structure and lacks an N-terminal transactivating domain. The three small Maf proteins have been implicated in a number of physiological processes, including development, differentiation, haematopoiesis and stress response. Interestingly, these three proteins regulate the stress response via different mechanisms.

## **SEPT9 Antibody (C-term) - References**

Proc. Natl. Acad. Sci. U.S.A. 96:6428-6433(1999). Cancer Res. 60: 4729-4734, 2000. Oncogene 20: 5930-5939, 2001.

## SEPT9 Antibody (C-term) - Citations

- Targeted knockdown of SEPT9\_v1 inhibits tumor growth and angiogenesis of human prostate cancer cells concomitant with disruption of hypoxia-inducible factor-1 pathway.
- Disruption of transforming growth factor-beta signaling by five frequently methylated genes leads to head and neck squamous cell carcinoma pathogenesis.