

#### **PAX5 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11704c

#### **Specification**

## **PAX5 Antibody (Center) - Product Information**

Application WB, IHC-P, FC,E

Primary Accession <u>002548</u>

Other Accession <u>Q02650</u>, <u>NP 057953.1</u>

Reactivity
Predicted
Host
Clonality
Isotype
Calculated MW
Antigen Region

Human
Mouse
Rabbit
Polyclonal
Rabbit IgG
178-207

### PAX5 Antibody (Center) - Additional Information

#### **Gene ID 5079**

#### **Other Names**

Paired box protein Pax-5, B-cell-specific transcription factor, BSAP, PAX5

### Target/Specificity

This PAX5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 178-207 amino acids from the Central region of human PAX5.

#### **Dilution**

WB~~1:1000 IHC-P~~1:10~50 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**

PAX5 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

#### PAX5 Antibody (Center) - Protein Information

### Name PAX5





**Function** Transcription factor that plays an essential role in commitment of lymphoid progenitors to the B-lymphocyte lineage (PubMed:10811620, PubMed:27181361). Fulfills a dual role by repressing B-lineage inappropriate genes and simultaneously activating B-lineage- specific genes (PubMed:10811620, PubMed:27181361). In turn, regulates cell adhesion and migration, induces V(H)-to-D(H)J(H) recombination, facilitates pre-B-cell receptor signaling and promotes development to the mature B-cell stage (PubMed:32612238). Repression of the cohesin- release factor WAPL causes global changes of the chromosomal architecture in pro-B cells to facilitate the generation of a diverse antibody repertoire (PubMed:32612238).

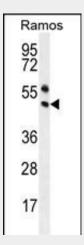
**Cellular Location** Nucleus.

## **PAX5 Antibody (Center) - Protocols**

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

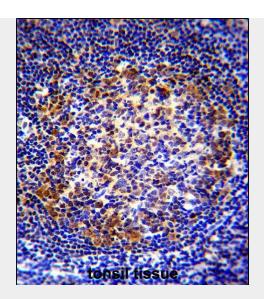
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

#### PAX5 Antibody (Center) - Images

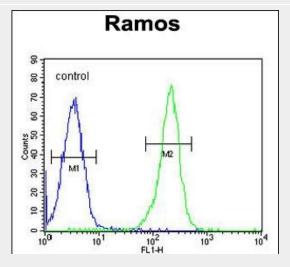


PAX5 Antibody (Center) (Cat. #AP11704c) western blot analysis in Ramos cell line lysates (35ug/lane). This demonstrates the PAX5 antibody detected the PAX5 protein (arrow).





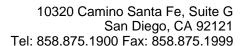
PAX5 Antibody (Center) (Cat. #AP11704c)immunohistochemistry analysis in formalin fixed and paraffin embedded human tonsil tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of PAX5 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



PAX5 Antibody (Center) (Cat. #AP11704c) flow cytometric analysis of Ramos cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### PAX5 Antibody (Center) - Background

This gene encodes a member of the paired box (PAX) family of transcription factors. The central feature of this gene family is a novel, highly conserved DNA-binding motif, known as the paired box. PAX proteins are important regulators in early development, and alterations in the expression of their genes are thought to contribute to neoplastic transformation. This gene encodes the B-cell lineage specific activator protein that is expressed at early, but not late stages of B-cell differentiation. Its expression has also been detected in developing CNS and testis and so the encoded protein may also play a role in neural development and spermatogenesis. This gene is located at 9p13, which is involved in t(9;14)(p13;q32) translocations recurring in small lymphocytic lymphomas of the plasmacytoid subtype, and in derived





large-cell lymphomas. This translocation brings the potent E-mu enhancer of the IgH gene into close proximity of the PAX5 promoter, suggesting that the deregulation of transcription of this gene contributes to the pathogenesis of these lymphomas. Alternatively spliced transcript variants encoding different isoforms have been described but their biological validity has not been determined.

# **PAX5 Antibody (Center) - References**

Song, J., et al. Arch. Pathol. Lab. Med. 134(11):1702-1705(2010) Okamoto, R., et al. Haematologica 95(9):1481-1488(2010) Best, A., et al. Leuk. Res. 34(8):1098-1102(2010) Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010): Vidal, L.J., et al. Mol. Cancer Res. 8(3):444-456(2010)