

PRODUCT INFORMATION



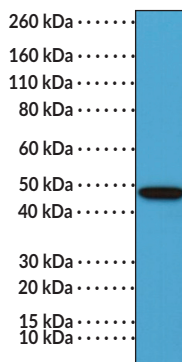
Pax5 (C-Term) Rabbit Monoclonal Antibody (Clone RM331)

Item No. 32268

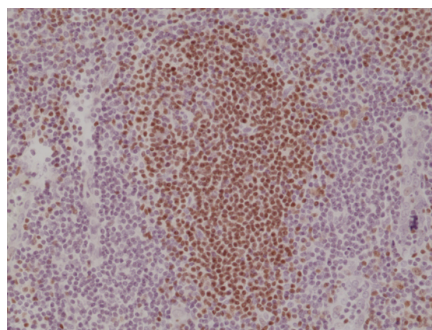
Overview and Properties

Contents:	This vial contains 100 µl of protein A-affinity purified monoclonal antibody.
Synonyms:	B Cell Lineage Specific Activator, BSAP, Paired Box Protein 5, Transcription Factor Pax5
Immunogen:	Peptide from the C-terminal region of human Pax5
Cross Reactivity:	(+) Pax5
Species Reactivity:	(+) Human
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
Clone:	RM331
Host:	Rabbit
Isotype:	IgG
Applications:	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution for IHC is 1:500-1:1,000 and 1:1,000-1:2,000 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



WB of Raji cell lysates using Pax5 (C-Term) Rabbit Monoclonal Antibody (Clone RM331) at a 1:1,000 dilution.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human tonsil tissue using Pax5 (C-Term) Rabbit Monoclonal Antibody (Clone RM331) at a 1:1,000 dilution.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Paired box (Pax) protein 5 (Pax5) is a transcription factor and member of the Pax family that functions as a transcriptional activator and repressor with an essential role in B cell development.^{1,2} It is composed of a DNA-binding paired domain, conserved octapeptide, partial homeodomain, transactivation domain, and an inhibitory domain.¹ PAX5 is exclusively expressed in hematopoietic stem cells committed to the B cell lineage. It is switched on during the transition from uncommitted pre-pro-B cells to committed B cells during lymphopoiesis, expressed throughout development to the mature B cell stage, and is repressed during terminal plasma cell differentiation. Pax5 downregulates expression of genes required for myeloid and T cell development, such as *CSF1R* and *NOTCH1*, and activates expression of genes encoding B cell receptor (BCR) signaling components, as well as regulatory and structural proteins involved in B cell migration, antigen presentation, signaling, adhesion, and germinal center B cell formation.^{1,2} PAX5 knockdown inhibits V_H-DJ_H recombination in pro-B cells. Intragenic amplification of PAX5 is associated with poor prognosis in B cell precursor acute lymphoblastic leukemia (BCP-ALL).³ Cayman's Pax5 (C-Term) Rabbit Monoclonal Antibody (Clone RM331) can be used for immunohistochemistry (IHC) and Western blot (WB) applications.

References

1. Cobaleda, C., Schebesta, A., Delogu, A., *et al.* Pax5: The guardian of B cell identity and function. *Nat. Immunol.* **8(5)**, 463-470 (2007).
2. Medvedovic, J., Ebert, A., Tagoh, H., *et al.* Pax5: A master regulator of B cell development and leukemogenesis. *Advances in immunology*. Alt, F.W., editor, 1st edition, *Academic Press* (2011).
3. Schwab, C. and Harrison, C.J. Advances in B-cell precursor acute lymphoblastic leukemia genomics. *Hemasphere* **2(4)**, e53 (2018).

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