Technical Data Sheet

Purified Mouse Anti-Pax-5

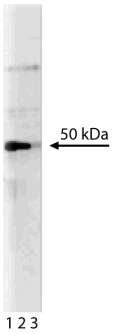
Product Information

Material Number:	**610862**
Size:	50 µg
Concentration:	250 µg/ml
Clone:	24/Pax-5
Immunogen:	Human Pax-5 aa. 151-306
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Mouse Tested in Development: Human
Target MW:	50 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

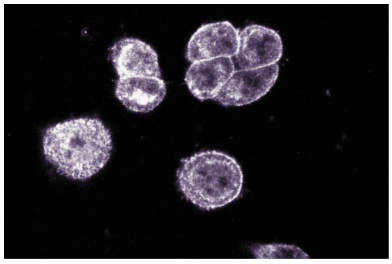
Description

There are at least nine members of the ***pa****ired box* ***x*** *(Pax)* gene family whose protein products are transcription factors involved in development. The conserved paired box DNA-binding domain is found in the N-terminal region of Pax proteins. An octomer and homeodomain sequence are conserved in the center of the proteins. The Ser/Thr/Pro-rich region in the C-terminal portion contains a conserved 100 amino acid transactivating domain. One of the best studied Pax family members, Pax 5, is a **B** cell **s**pecific **a**ctivator **p**rotein (BSAP). In the early stages of B cell development, Pax-5 influences the expression of several B-cell-specific genes, such as CD19 and CD20. Pax-5 is expressed primarily in pro-, pre-, and mature B cells, but not in plasma cells. Interestingly, *Pax-5* mRNA is transiently detected in the mesencephalon and spinal cord during embryogenesis. Expression then shifts to the fetal liver and correlates with the onset of B lymphopoiesis. Pax-5 has been found to be important in both B cell and nervous system development.

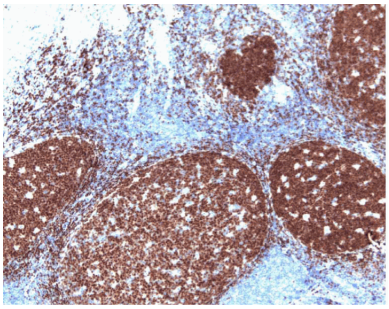
This antibody is routinely tested by western blot analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Western blot analysis of Pax-5 on mouse spleen. *Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of anti-Pax-5 antibody.*



Immunofluorescent staining on SW-13 cells.



Pax-5 (clone 24) staining on human tonsil. *Formalin fixed paraffin section with citrate buffer pretreatment 10X.*

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20° C.

BD Biosciences

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Application Notes

Application

Western blot	Routinely Tested
Immunohistochemistry	Tested During Development
Immunofluorescence	Tested During Development
Immunoprecipitation	Not Recommended

Recommended Assay Procedure:

Western Blot: For detailed procedures please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml.

Suggested Companion Products

Catalog Number	Name	Size	Clone
611462	Mouse Spleen Lysate	500 µg	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Adams B, Dorfler P, Aguzzi A, et al. Pax-5 encodes the transcription factor BSAP and is expressed in B lymphocytes, the developing CNS, and adult testis. *Genes Dev.* 1992; 6(9):1589-1607.(Biology)

Foss HD, Reusch R, Demel G, et al. Frequent expression of the B-cell-specific activator protein in Reed-Sternberg cells of classical Hodgkin's disease provides further evidence for its B-cell origin. *Blood.* 1999; 94(9):3108-3113.(Clone-specific: Immunohistochemistry)

Hertel CB, Zhou XG, Hamilton-Dutoit SJ, Junker S. Loss of B cell identity correlates with loss of B cell-specific transcription factors in Hodgkin/Reed-Sternberg cells of classical Hodgkin lymphoma. *Oncogene.* 2002; 21(32):4908-4920.(Clone-specific: Immunohistochemistry)

Klein U, Tu Y, Stolovitzky GA, et al. Transcriptional analysis of the B cell germinal center reaction. *Proc Natl Acad Sci U S A.* 2003; 100(5):2639-2644. (Clone-specific: Immunohistochemistry)

Zwollo P, Arrieta H, Ede K, Molinder K, Desiderio S, Pollock R. The Pax-5 gene is alternatively spliced during B-cell development. *J Biol Chem.* 1997; 272(15):10160-10168.(Biology)