

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human Pax5 in direct ELISAs and Western blots.
Source	Recombinant Monoclonal Rabbit IgG Clone # 1207C
Purification	Protein A or G purified from cell culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Pax5 Thr141-His391 Accession # Q02548
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	See Below
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
Immunohistochemistry	3-25 µg/mL	See Below
Simple Western	1 µg/mL	See Below

DATA

Western Blot

Detection of Human Pax5/BSAP by Western Blot. Western blot shows lysates of Raji human Burkitt's lymphoma cell line, Ramos human Burkitt's lymphoma cell line, Daudi human Burkitt's lymphoma cell line, and Nalm-6 human Pre-B acute lymphocytic leukemia cell line. PVDF membrane was probed with 0.1 µg/mL of Rabbit Anti-Human/Mouse Pax5/BSAP Monoclonal Antibody (Catalog # MAB3487) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for Pax5/BSAP at approximately 42 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Flow Cytometry

Detection of Pax5/BSAP in Human PBMCs by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs) were stained with Mouse Anti-Human CD19 APC-conjugated Monoclonal Antibody (Catalog # FAB4867A) and either (A) Rabbit Anti-Human/Mouse Pax5/BSAP Monoclonal Antibody (Catalog # MAB3487) or (B) Normal Rabbit IgG Control (Catalog # MAB1050) followed by Phycoerythrin-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # F0110). To facilitate intracellular staining, cells were fixed and permeabilized with FlowX FoxP3 Fixation & Permeabilization Buffer Kit (Catalog # FC012). View our protocol for [Staining Intracellular Molecules](#).

Immunohistochemistry

Pax5/BSAP in Mouse Embryo. Pax5/BSAP was detected in perfusion fixed frozen sections of mouse embryo (13 d.p.c.) using Rabbit Anti-Human/Mouse Pax5/BSAP Monoclonal Antibody (Catalog # MAB3487) at 3 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Rabbit HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS005) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

Simple Western

Detection of Human Pax5/BSAP by Simple Western™. Simple Western lane view shows lysates of Raji human Burkitt's lymphoma cell line, Ramos human Burkitt's lymphoma cell line, Daudi human Burkitt's lymphoma cell line, and Nalm-6 human Pre-B acute lymphocytic leukemia cell line, loaded at 0.2 mg/mL. A specific band was detected for Pax5/BSAP at approximately 56 kDa (as indicated) using 1 µg/mL of Rabbit Anti-Human/Mouse Pax5/BSAP Monoclonal Antibody (Catalog # MAB3487). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Pax5, also known as BSAP (B-cell-specific transcription factor) is a 42 kDa protein belonging to the paired box transcription factor family. It is a developmental regulator that is important for B-cell lineage commitment and development. Human Pax5 is a 391 amino acid (aa) protein containing the paired DNA-binding domain at the N-terminal region. Several alternatively spliced isoforms with altered C-terminal regions and possessing different transactivation properties have been described. All isoforms share the N-terminal 235 aa with full-length Pax5. Human Pax5 shares 99%, 97% and 94% aa sequence identity with mouse, bovine and canine Pax5, respectively.