

DESCRIPTION

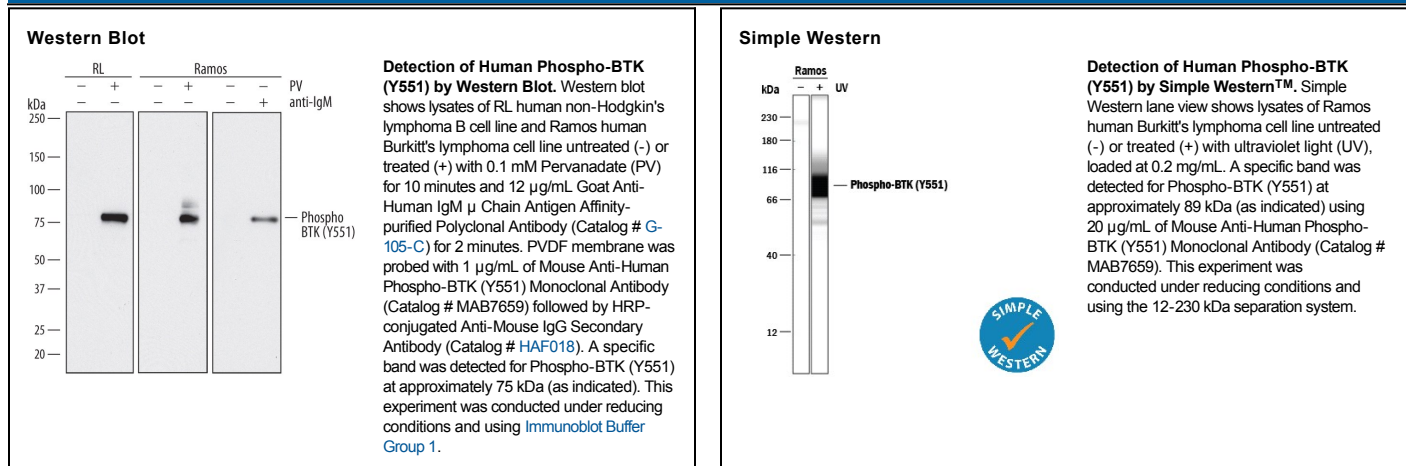
Species Reactivity	Human
Specificity	Detects human BTK when phosphorylated at Y551.
Source	Monoclonal Mouse IgG _{2A} Clone # 797837
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Phosphopeptide containing the human BTK Y551 site
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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	1 µg/mL	See Below
Simple Western	20 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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

Bruton tyrosine kinase (Btk) is a 75 kDa cytoplasmic protein tyrosine kinase that is widely expressed in hematopoietic cells. Btk is required for B cell receptor signaling and B cell development. Defects in Btk result in X-linked agammaglobulinemia which is characterized by a severely decreased level of circulating antibodies. Like other Tec family kinases, Btk contains a Pleckstrin homology domain, a Tec homology domain, an SH3 domain, an SH2 domain, and a protein kinase domain. Association of the Btk SH2 domain with the B cell linker protein (BLNK) is required for the activation of PLCγ by Btk. Btk can be activated by Lyn or Syk phosphorylation of Tyr551 within the catalytic domain. Within aa 546 - 556, human Btk shares 100% aa sequence identity with mouse and rat Btk.