

DESCRIPTION

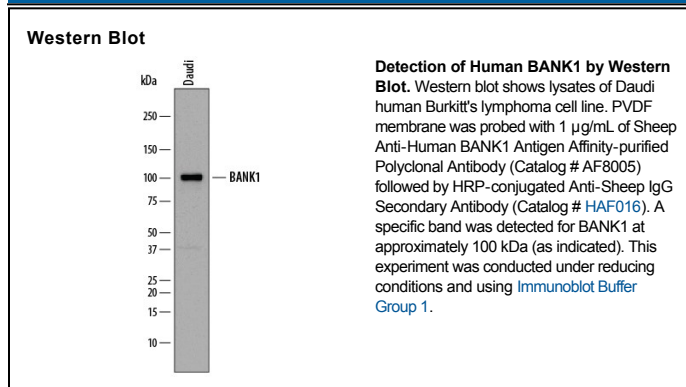
Species Reactivity	Human
Specificity	Detects human BANK1 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human BANK1 Ser480-His785 (Cys650Arg) Accession # Q8NDB2
Formulation	Lyophilized from a 0.2 µm 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

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 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

BANK1 (B cell scaffold protein with ANKYrin repeats) is a cytoplasmic scaffold protein containing ankyrin repeats. Although its predicted MW is 85 kDa, due to its highly acidic nature, it runs anomalously at 97-105 kDa in SDS-PAGE. It is expressed in select cell types, including mature B cells and pancreatic islet β-cells. In B cells, following BCR activation, IP₃ is generated and BANK1 is phosphorylated by BCR-associated Syk (Spleen Tyr kinase). At this point, phosphorylated BANK1 subsequently interacts with both cytosolic Lyn (Lck/Yes-related Novel tyrosine kinase) and IP₃R, leading to an IP₃ receptor highly sensitive to IP₃. Increased cellular IP₃ binding to IP₃R stimulates the release of calcium from intracellular stores. BANK1 is also posited to participate in the regulation of IgM production, its role in this case being that of a negative modulator of secretion. Human BANK1 is 785 amino acids (aa) in length. It contains an IP₃R interaction region (aa 1-154), followed by a DBB domain (aa 200-327) that is involved in dimerization, and two consecutive ANK repeats (aa 345-408). There are at least three isoform variants. One utilizes an alternative start site at Met31, a second contains an eight aa substitution for aa 1-23, and a third shows a deletion of aa 24-156. BANK1 is known to form homo- and heterodimers with its isoforms, and a Arg61 to His61 transition is reported to be correlated with reduced homooligomer formation. Over aa 480-785, human BANK1 shares 73% aa sequence identity with mouse BANK1.