

#### DESCRIPTION

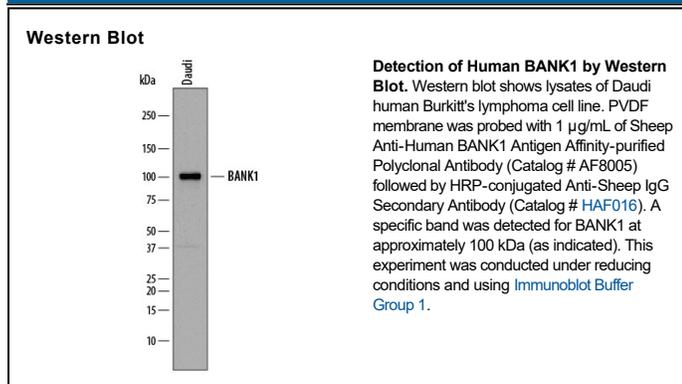
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human BANK1 in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human BANK1 Ser480-His785 (Cys650Arg) Accession # Q8NDB2
<b>Formulation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

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below

#### DATA



#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### 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, IP<sub>3</sub> 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 IP<sub>3</sub>R, leading to an IP<sub>3</sub> receptor highly sensitive to IP<sub>3</sub>. Increased cellular IP<sub>3</sub> binding to IP<sub>3</sub>R 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 IP<sub>3</sub>R 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.