

DESCRIPTION

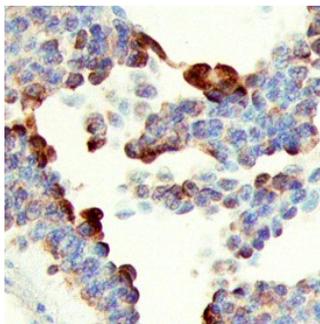
Species Reactivity	Human
Specificity	Detects human SHB in direct ELISAs.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human SHB Ala2-Phe128 Accession # Q15464
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. 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
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry
 <p>SHB in Human Ovarian Cancer Tissue. SHB was detected in immersion fixed paraffin-embedded sections of human ovarian cancer tissue using Goat Anti-Human SHB Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7036) at 10 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in epithelial cells. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>

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

SHB (SH2 homology protein in B/β-cells) is a 55-59 kDa cytoplasmic adaptor protein that serves as a link between phosphotyrosine residues and downstream signaling pathways. SHB is ubiquitously expressed, and binds tyrosine kinase receptors such as FGFR1, VEGFR2, and the TCR (ζ-chain) following their activation. It is highly modular, and through a variety of motifs, is able to bind multiple, structurally unrelated proteins that collectively generate a signal transduction network. Human SHB is 509 amino acids (aa) in length. It contains an N-terminal Pro-rich region that binds SH3 domain-containing proteins (aa 19-45), a central PTB domain that binds select aa motifs, and a C-terminal SH2 domain that interacts with phosphotyrosines (aa 410-504). There are at least nine utilized phosphorylation sites. There are two isoform variants. One is 66-68 kDa in size, and possesses an 87 aa Pro-rich N-terminal extension. This MW may increase to 77-80 kDa following posttranslational processing. A second variant shows an 18 aa substitution for aa 280-509. Over aa 2-128, human SHB shares 91% aa identity with mouse SHB.