

DESCRIPTION

Species Reactivity	Rat
Specificity	Detects rat FGF-BP in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 10% cross-reactivity with recombinant human FGF-BP is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant rat FGF-BP Glu21-Cys238 Accession # Q9QY10
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
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.

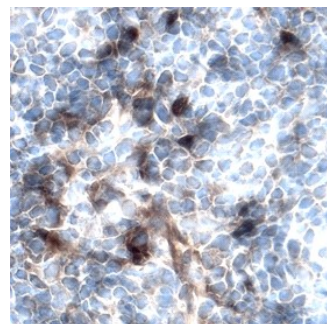
APPLICATIONS

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	0.1 µg/mL	Recombinant Rat FGF-BP (Catalog # 1413-FB)
Immunohistochemistry	5-15 µg/mL	See Below
Blockade of Receptor-ligand Interaction	In a functional ELISA, 0.5-2 µg/mL of this antibody will block 50% of the binding of 50 ng/mL of Recombinant Rat FGF-BP (Catalog # 1413-FB) to immobilized Recombinant Human FGF-basic (Catalog # 233-FB) coated at 5 µg/mL (100 µL/well). At 10 µg/mL, this antibody will block >90% of the binding.	

DATA

Immunohistochemistry



FGF-BP in Rat Thymus. FGF-BP was detected in perfusion fixed frozen sections of rat thymus using Rat FGF-BP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1413) at 5 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 labeling was localized to the cytoplasm of lymphocytes. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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

Fibroblast growth factor binding protein (FGF-BP), also known as HBp17, is a secreted glycoprotein that increases the bioavailability of FGFs (1). Mature FGF-BP is a 34 kDa O-glycosylated protein with five conserved intrachain disulfide bonds (2-4). FGF-BP contains a heparin-binding domain (aa 113-146) and a distinct FGF-binding region (aa 197-238) (5). Mature rat FGF-BP shares 54% and 81% aa sequence identity with mouse and rat FGF-BP, respectively. FGF-BP is expressed throughout development and in adult squamous epithelium (6, 7). It is upregulated in injured skin, renal tubular epithelium, and spinal nerves as well as in carcinomas of the skin, colon, and pancreas (3, 8-11). FGF-BP binds FGF -1, -2, -7, -10, and -22 which are secreted and sequestered in the extracellular matrix (ECM) (8, 12). The interactions of FGF-BP with heparin sulfate proteoglycans (HSPG) and FGF, modulates their activities (7, 9, 13, 14). FGF-BP enhances the mitogenic effects of FGFs, thereby contributing to epithelial, endothelial, and neuronal tissue repair, angiogenesis, and tumor growth (8-10, 12, 15, 16).

References:

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