

## DESCRIPTION

<b>Species Reactivity</b>	Rat
<b>Specificity</b>	Detects rat FGF-BP in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human FGF-BP is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 227239
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant rat FGF-BP Glu21-Cys238 Accession # Q9QY10
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the antibody by the LAL method.
<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 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
<b>Western Blot</b>	1 µg/mL	Recombinant Rat FGF-BP (Catalog # 1413-FB)

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<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

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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