

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects all isoforms of human FGF R2 ( $\alpha$ and $\beta$ , IIIb and IIIc). In direct ELISAs, approximately 25-50% cross-reactivity with mouse FGF R2 and no cross-reactivity with any isoform of recombinant human (rh) FGF R1, rhFGF R3, or rhFGF R4 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 98739
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human FGF R2 isoforms and mouse myeloma cell line NS0-derived recombinant human FGF R2 isoforms
<b>Endotoxin Level</b>	<0.10 EU per 1 $\mu$ g of the antibody by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 $\mu$ m 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>Flow Cytometry</b>	2.5 $\mu$ g/10 <sup>6</sup> cells	Kato III human cell line
<b>Immunohistochemistry</b>	8-25 $\mu$ g/mL	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
<b>Neutralization</b>	Measured by its ability to neutralize FGF R2 $\beta$ -mediated inhibition of proliferation in the NR6R-3T3 mouse fibroblast cell line. The Neutralization Dose (ND <sub>50</sub> ) is typically 0.1-0.5 $\mu$ g/mL in the presence of 6 ng/mL Recombinant Human FGF R2 $\beta$ (IIIc) Fc Chimera, 0.3 ng/mL Recombinant Human FGF acidic, and 10 $\mu$ g/mL heparin.	

## DATA

**Neutralization**

**FGF R2 $\beta$  Inhibition of FGF acidic-dependent Cell Proliferation and Neutralization by Human FGF R2 Antibody.** Recombinant Human FGF R2 $\beta$  (IIIc) Fc Chimera (Catalog # 684-FR) inhibits Recombinant Human FGF acidic (Catalog # 232-FA) induced proliferation in the NR6R-3T3 mouse fibroblast cell line in a dose-dependent manner (orange line). Inhibition of Recombinant Human FGF acidic (0.3 ng/mL) activity elicited by Recombinant Human FGF R2 $\beta$  (IIIc) Fc Chimera (6 ng/mL) is neutralized (green line) by increasing concentrations of Human FGF R2 Monoclonal Antibody (Catalog # MAB6843). The ND<sub>50</sub> is typically 0.1-0.5  $\mu$ g/mL in the presence of heparin (10  $\mu$ g/mL).

**Immunohistochemistry**

**FGF R2 in Human Adenocarcinoma.** FGF R2 was detected in immersion fixed paraffin-embedded sections of human adenocarcinoma using Mouse Anti-Human FGF R2 Monoclonal Antibody (Catalog # MAB6843) at 25  $\mu$ g/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

## 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 Receptor 2 (FGF R2) is one of four closely related transmembrane tyrosine kinases (FGF R1-4) that function as receptors for the fibroblast growth factor family. Multiple isoforms are generated by alternative mRNA splicing resulting in extracellular domains with three ( $\alpha$  isoforms) or two ( $\beta$  isoforms) Ig-like domains. In addition, alternative exon usage in the Ig III (membrane proximal) domain results in IIIb or IIIc isoforms.