

Datasheet for 600-401-MM7S**FGFR2 Antibody****Overview**

Description:	Anti-FGFR2 (RABBIT) Antibody - 600-401-MM7S
Item No.:	600-401-MM7S
Size:	25 µL
Applications:	ELISA, IF, IHC
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background: FGFR2 (Fibroblast Growth Factor Receptor 2) are tyrosine-protein kinase that acts as cell-surface receptor for fibroblast growth factors and are involved in a wide array of pathways known to play a significant role in cancer, angiogenesis, wound healing, cell migration, neural outgrowth and embryonic development. Phosphorylates PLCG1, FRS2 and PAK4. Ligand binding leads to the activation of several signaling cascades. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. Phosphorylation of FRS2 triggers recruitment of GRB2, GAB1, PIK3R1 and SOS1, and mediates activation of RAS, MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway. FGFR2 signaling is down-regulated by ubiquitination, internalization and degradation. The mechanisms by which FGFR can be misregulated vary between cancers. Amplification of the receptors has been observed in lung and breast cancers, coding mutations and deletions have been seen in many cancers, and more recently, FGFR fusions that lead to pathway activation have been demonstrated to have oncogenic potential across multiple cancer types. Anti-FGFR2 Antibody is useful for researchers interested in lung cancer research, crouzon syndrome, Pfeiffer syndrome, Craniosynostosis, bone and skin abnormalities, ERK Signaling, and Akt Signaling.

Synonyms:	Rabbit Anti-Fibroblast Growth Factor Receptor 2 Antibody, Rabbit Anti-FGFR2 Antibody, Keratinocyte Growth Factor Receptor, Bacteria-Expressed Kinase, KGFR, BEK, Protein Tyrosine Kinase Receptor Like 14, BEK Fibroblast Growth Factor Receptor, Craniofacial Dysostosis 1, Jackson-Weiss Syndrome, Pfeiffer Syndrome, Crouzon Syndrome, CD332 Antigen, EC 2.7.10.1, FGFR-2, BFR-1, CD332, K-SAM, K-Sam, BBDS, CEK3, ECT1, TK14, TK25, CFD1, KSAM, JWS
Host Species:	Rabbit
Clonality:	Polyclonal

Format: IgG

Target Details

Gene Name:	FGFR2
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-FGFR2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a C-terminal portion of human FGFR2 conjugated to Keyhole Limpet Hemocyanin (KLH).
Purity/Specificity:	This affinity purified antibody is directed against human FGFR2. This product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with the antigen based on 100% homology with the immunizing sequence to mouse.
Relevant Links:	• UniProtKB - P21802 • NCBI - NP_000132.3 • GeneID - 2263

Application Details

Tested Applications:	ELISA, IF, IHC
Application Note:	Anti-FGFR2 Antibody has been tested in ELISA, IF, and IHC. Positive control used: U-20S in immunofluorescence and mouse spleen and gallbladder in immunohistochemistry.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:50,000
IF:	5-10µg/mL
IHC:	1:100-1:200

Formulation

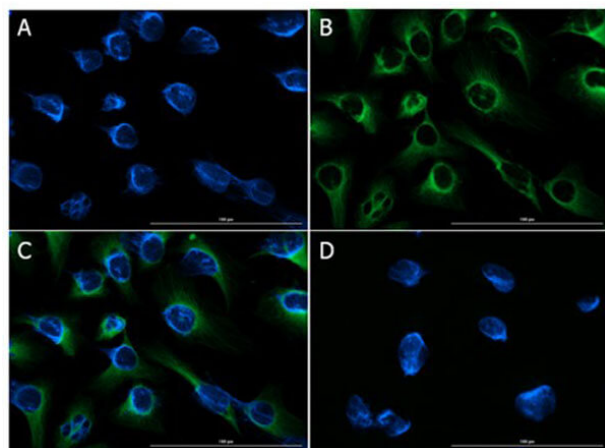
Physical State:	Liquid (sterile filtered)
Concentration:	0.91 mg/ml by UV absorbance at 280 nm

Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

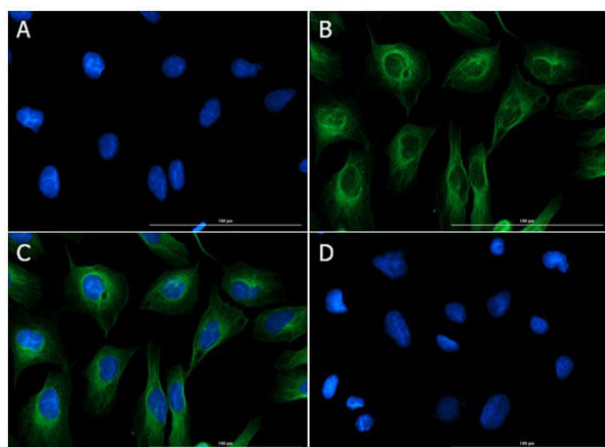
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



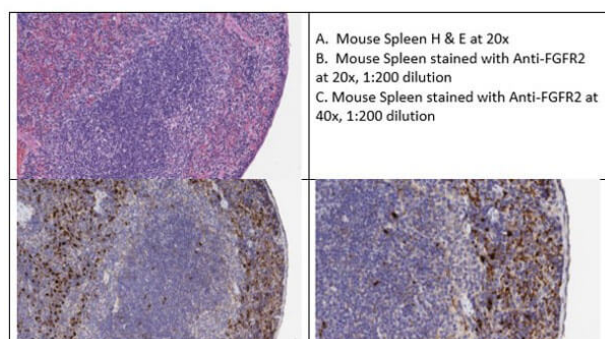
Immunofluorescence Microscopy

Immunofluorescence of Rabbit Anti-FGFR2 Antibody. Cells: U2OS Cells. Fixative: 4% PFA. Permeabilization: 0.3% Triton X-100. Primary Antibody: Anti-FGFR2 at 5µg/mL overnight at 2-8°C. Secondary Antibody: Donkey Anti-Rabbit IgG DyLight™488 (p/n 611-741-127) at 5µg/mL for 1hr at RT. Nuclear Counterstain: DAPI. Staining: (A) DAPI. (B) Anti-FGFR2+DyLight™488. (C) Merge A+B. (D) Secondary Only. Expected localization: punctate cytoplasmic expression (Golgi), plasma membrane.



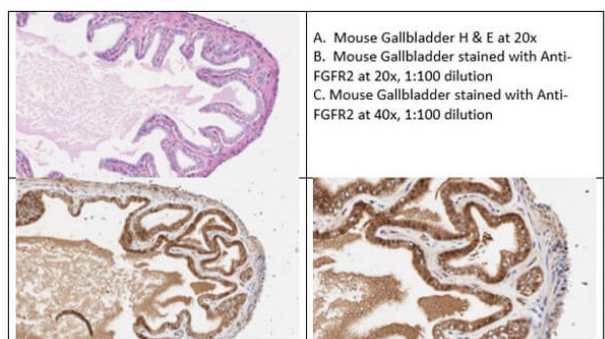
Immunofluorescence Microscopy

Immunofluorescence of Rabbit Anti-FGFR2 Antibody. Cells: U2OS Cells. Fixative: 4% PFA. Permeabilization: 0.3% Triton X-100. Primary Antibody: Anti-FGFR2 at 10µg/mL overnight at 2-8°C. Secondary Antibody: Donkey Anti-Rabbit IgG DyLight™488 (p/n 611-741-127) at 5µg/mL for 1hr at RT. Nuclear Counterstain: DAPI. Staining: (A) DAPI. (B) Anti-FGFR2+DyLight™488. (C) Merge A+B. (D) Secondary Only. Expected localization: punctate cytoplasmic expression (Golgi), plasma membrane.



Immunohistochemistry

Immunohistochemistry of Rabbit Anti-FGFR2 Antibody. Tissue: Mouse Spleen. Antigen Retrieval: HIER using Citrate buffer for 20mins. Fixative: none. Primary Antibody: Anti-FGFR2 at 1:200 for 30mins at RT. Secondary Antibody: Anti-Rabbit IgG Poly-HRP Ready-to-Use for 8min at RT. Counter Stain: Hematoxylin. Analysis Results: FGFR2 shows strong cytoplasmic staining of cells in the red pulp and minimal and focal strong staining of cells in the white pulp in mouse splenic tissue at 1:100 and 1:200.



Immunohistochemistry

Immunohistochemistry of Rabbit Anti-FGFR2 Antibody. Tissue: Mouse Gallbladder. Antigen Retrieval: HIER using Citrate buffer for 20mins. Fixative: none. Primary Antibody: Anti-FGFR2 at 1:100 for 30mins at RT. Secondary Antibody: Anti-Rabbit IgG Poly-HRP Ready-to-Use for 8min at RT. Counter Stain: Hematoxylin. Analysis Results: FGFR2 shows diffuse strong cytoplasmic staining of glandular cells in mouse gallbladder tissue at a dilution of 1:100. In the absence of mouse specific literature concerning the desired staining pattern and extrapolating to that described in the Human Protein Atlas for human gallbladder tissue, this antibody is acceptable for IHC.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.