

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse FGF R5 β in direct ELISAs and Western blots. In Western blots, less than 5% cross-reactivity with recombinant human (rh) FGF R1 α (IIIb), recombinant mouse (rm) FGF R2 β (IIIc), rmFGF R3 α (IIIb), rhFGF R3 α (IIIc), rhFGF R1 β (IIIc), rmFGF R2 β (IIIb), rhFGF R1 α (IIIc), rmFGF R2 α (IIIc), rhFGF R1 β (IIIb), rmFGF R2 α (IIIb), rmFGF R2, and rmFGF R4 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse FGF R5 β Ala21-Pro374 Accession # Q91V87
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m filtered solution in PBS.

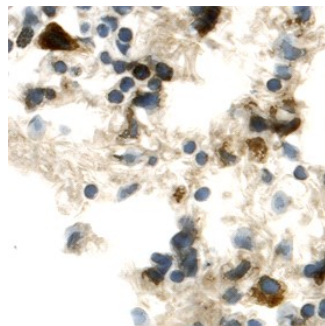
APPLICATIONS

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
Western Blot	0.1 μ g/mL	Recombinant Mouse FGF R5/FGFRL1 Fc Chimera (Catalog # 1899-FR)
Immunohistochemistry	5-15 μ g/mL	See Below

DATA

Immunohistochemistry



FGF R5/FGFRL1 in Mouse Lung.

FGF R5/FGFRL1 was detected in perfusion fixed frozen sections of mouse lung using Goat Anti-Mouse FGF R5/FGFRL1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1899) at 15 μ g/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 plasma membrane and cytoplasm of alveolar cells. 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 receptor 5 (FGF R5), also known as FGRL1, is a 65 kDa transmembrane member of the FGF receptor family (1). Mature mouse FGF R5 consists of a 354 amino acid (aa) extracellular domain (ECD) with three immunoglobulin-like domains, a 21 aa transmembrane segment, and a 134 aa cytoplasmic domain (2). FGF R5 is distinct from other FGF receptor family members in that it does not contain a cytoplasmic tyrosine kinase domain (2, 3). Within the ECD, mouse FGF R5 shares 94% and 98% aa sequence identity with human and rat FGF R5, respectively. Alternate splicing results in an isoform that lacks the first Ig-like domain (2). FGF R5 is widely expressed, and expression of two species of mRNA in cartilage and pancreas may indicate the presence of both splice forms (2-6). Both the full length and truncated isoforms of FGF R5 bind FGF basic; the full length form additionally binds to heparin (2, 6). FGF R5 may function as a decoy receptor by binding FGF but not transducing its mitogenic signals (6).

References:

1. Mohammadi, M. *et al.* (2005) *Cytokine Growth Factor Rev.* **16**:107.
2. Sleeman, M. *et al.* (2001) *Gene* **271**:171.
3. Kim, I. *et al.* (2001) *Biochim. Biophys. Acta* **1518**:152.
4. Antoine, M. *et al.* (2005) *Growth Factors* **23**:87.
5. Wiedemann, M. *et al.* (2000) *Genomics* **69**:275.
6. Trueb, B. *et al.* (2003) *J. Biol. Chem.* **278**:33857.