

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human FGF-10 in Western blots. Does not cross-react with recombinant human FGF-3, -5, -6, -7, -9, -13, or -19.
Source	Monoclonal Mouse IgG _{2B} Clone # 186803
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human FGF-10 Cys37-Ser208 Accession # O15520
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 either lyophilized or 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	1 µg/mL	Recombinant Human FGF-10 (Catalog # 345-FG)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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

The FGFs are a growing family of heparin-binding growth factors that show a variety of biological activities toward cells of mesenchymal, neuronal and epithelial origin. All FGFs have two conserved cysteine residues and share significant amino acid sequence homology. FGF-10 was originally identified from rat embryos by homology-based polymerase chain reaction. Human and mouse FGF-10 were subsequently cloned. The human FGF-10 cDNA encodes a 208 amino acid residue protein with a hydrophobic amino-terminal signal peptide. Human FGF-10 shares approximately 92% and 95% amino acid sequence identity with mouse and rat FGF-10, respectively. Among the FGF family members, FGF-10 is most closely related to FGF-7. The expression of FGF-10 transcripts has been shown to be most abundant in the embryo and adult lung. Recombinant FGF-10 preparations have been shown to be mitogenic for epithelial and epidermal cells but not fibroblasts. Based on its *in vitro* biological activities and *in vivo* expression pattern, FGF-10 has been proposed to play unique roles in the brain, in lung development, wound healing and limb bud formation.

References:

1. Yamasaki, M. *et al.* (1996) *J. Biol. Chem.* **271**:15918.
2. Emoto, H. *et al.* (1997) *J. Biol. Chem.* **272**:23191.
3. Ohuchi, H. *et al.* (1997) *Development* **124**:2235.
4. Tagashira, S. *et al.* (1997) *Gene* **197**:399.
5. Bellusci, S. *et al.* (1997) *Development* **124**:4867.