Canine KGF/FGF-7 Antibody

Monoclonal Mouse IgG_1 Clone # 299026

Catalog Number: MAB1957

DESCRIPTION

Species Reactivity	Canine
Specificity	Detects canine KGF/FGF-7 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) FGF-11, -12, -13, -16, -20, -21, -22, -23, or rhFGFbasic is observed.
Source	Monoclonal Mouse IgG_1 Clone # 299026
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant canine KGF/FGF-7 Cys32-Thr194 Accession # P79150
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.

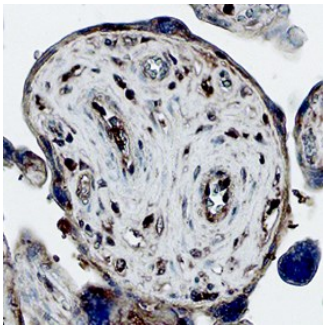
APPLICATIONS

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
Immunocytochemistry	8-25 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

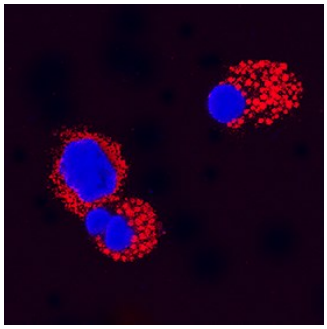
DATA

Immunohistochemistry



KGF/FGF-7 in Canine Placenta. KGF/FGF-7 was detected in immersion fixed paraffin-embedded sections of canine placenta (chorionic villi) using Mouse Anti-Canine KGF/FGF-7 Monoclonal Antibody (Catalog # MAB1957) at 25 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to chorionic villi trophoblasts. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

Immunocytochemistry



KGF/FGF-7 in Canine PBMCs. KGF/FGF-7 was detected in immersion fixed canine peripheral blood mononuclear cells (PBMCs) using Mouse Anti-Canine KGF/FGF-7 Monoclonal Antibody (Catalog # MAB1957) at 25 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.

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.** • 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.

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BACKGROUND

The fibroblast growth factor (FGF) family consists of twenty three known structurally-related proteins that play key roles in development, morphogenesis, angiogenesis, wound healing and tumorigenesis (1). All FGFs share a common structural fold, the β-trefoil scaffold, in a conserved central region of approximately 120 amino acid (aa), which contains the active site and a heparin binding site (2). FGF-7, also known as keratinocyte growth factor (KGF), was originally identified from the conditioned medium of a human embryonic lung fibroblast cell line (3). It is secreted by cells of mesenchymal origin and functions predominantly on epithelial cells (1). The mature caFGF-7 is generated from a 194 aa precursor protein by cleavage of the first 31 aa at the N-terminus. It shares 97.4% and 95.9% sequence identity with human and mouse KGF, respectively (4). FGFs signal through high affinity tyrosine kinase receptors (FGF R) (5). Cellular responses to FGFs are modulated by heparan sulfate proteoglycans that are also known as low affinity FGF receptors and by heparin (6). Various isoforms of the four FGF R exist (FGF R-1 through -4). They are produced from alternatively spliced transcripts in both the extracellular and intracellular domains. FGF-7 signals through the FGF R2IIIb (also known as KGF R), which is a spliced variant of FGF R2 (7). KGF R binds FGF-1 and FGF-7 with high affinity and FGF-2 with a 20-fold lower affinity (8).

References:

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