Recombinant Mouse PDGFRL Fc Chimera

Catalog Number: 9739-PR

DESCRIPTION

Source

Human embryonic kidney cell, HEK293-derived

N-terminal Sequence Analysis	No results obtained. Gln22 inferred from enzymatic pyroglutamate treatment revealing His23
Structure / Form	Disulfide-linked homodimer
Predicted Molecular Mass	67 kDa

SPECIFICATIONS

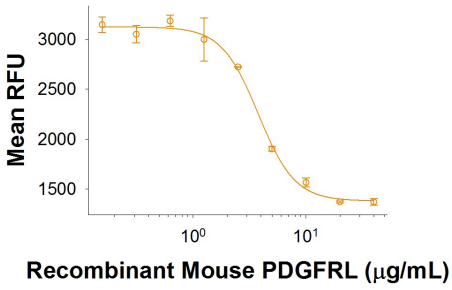
SDS-PAGE	65-82 kDa, reducing conditions
Activity	Measured by its ability to inhibit proliferation of HCT-116 human colorectal carcinoma cells. The ED_{50} for this effect is 1-6 µg/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 500 µg/mL in PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
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. ● 3 months, -20 to -70 °C under sterile conditions after reconstitution.

DATA

Bioactivity



Recombinant Mouse PDGFRL Fc Chimera (Catalog # 9739-PR) inhibits HCT-116 human Colorectal carcinoma proliferation. The ED_{50} for this effect is 1-6 µg/mL.

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BACKGROUND

Platelet-derived growth factor receptor-like protein (PDGFRL) is a 67 kDa glycoprotein protein consisting of two Ig-like C2-type domains. By sequence similarity, mouse PDGFRL is 90% similar to the human version and 95% similar to that of the rat. It is a secreted protein related to the class III subfamily of receptor tyrosine kinases (RTK), the platelet-derived growth factor receptors (1-5). The high frequency of loss of heterozygosity (LOH) near the gene of PDGFRL indicated in several studies that PDGFRL can be a tumor suppressor gene (TSG) in breast cancer (6-9), colorectal cancer, prostate cancer (10), non-small cell lung cancers (11) and hepatocellular carcinoma (12). A variant of PDGFRL is found to play a role in the development of Behçet disease, a complex immunoregulatory disease (13). The autoimmune role of PDGFRL is also supported by its up-regulation in a mouse model for Rheumatoid Arthritis (14). Another study also showed that PDGFRL may play a role in chondrocyte proliferation and differentiation (15).

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