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FGF-9

Catalog # PVGS1650

Product Information

Primary Accession	P54130
Species	Mouse
Sequence	Met1-Ser208
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	
Biological Activity	Measured in a cell proliferation assay using Balb/3T3 mouse embryonic fibroblast cells. The ED_{50} for this effect is 4.14 ng/ml.
Expression System	E. coli
Formulation	Supplied as a 0.2 μm filtered solution in 20 mM Tris, 150 mM NaCl, 5% Trehalose, 1 mM EDTA, 20% glycerol, 1 mM DTT, pH 8.5.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at -70°C or below, the product can be stored for 2-3 weeks at 2-8°C or 3 months at -20°C. Avoid repeated freeze-thaw cycles.

Additional Information

Gene ID	14180
Other Names	Fibroblast growth factor 9, FGF-9, Glia-activating factor, GAF, HBGF-9, Fgf9, Fgf-9
Target Background	Fibroblast growth factor-9 (FGF-9) is an approximately 26 kDa secreted glycoprotein of the FGF family. Secreted mouse FGF-9 lacks the N-terminal 1-3 aa and shares >98% sequence identity with rat, human, equine, porcine and bovine FGF-9. FGF-9 plays an important role in the regulation of embryonic development, cell proliferation, cell differentiation and cell migration. In the mouse embryo, the location and timing of FGF-9 expression affect the development of the skeleton, cerebellum, lungs, heart, vasculature, digestive tract, and testes. It may have a role in glial cell growth and differentiation during development, gliosis during repair and regeneration of brain tissue after damage, differentiation and survival of neuronal cells, and growth stimulation of glial tumors. Deletion of mouse FGF-9 is lethal at birth due to lung hypoplasia, and causes rhizomelia, or shortening of the proximal skeleton. An unusual constitutive dimerization of FGF 9 buries receptor interaction sites which lower its activity and increases heparin affinity which inhibits diffusion. A spontaneous mouse mutant, Eks, interferes with dimerization, resulting in monomeric, diffusible FGF-9 that causes elbow and knee synostoses (joint fusions) due to FGF-9 misexpression in developing joints.

Protein Information

Name	Fgf9
Synonyms	Fgf-9
Function	Plays an important role in the regulation of embryonic development, cell proliferation, cell differentiation and cell migration. May have a role in glial cell growth and differentiation during development, gliosis during repair and regeneration of brain tissue after damage, differentiation and survival of neuronal cells, and growth stimulation of glial tumors.
Cellular Location	Secreted.