Recombinant Protein Technical Manual

Recombinant Mouse FGF-9/FGF9 Protein (His Tag)(Active)

RPES0738

Product Data:

Product SKU: RPES0738

Size: 10µg

Species: Mouse

Expression host: E. coli

Uniprot: P54130

Protein Information:

Molecular Mass:	24.4 kDa
AP Molecular Mass:	25kDa
Tag:	C-6His
Bio-activity:	Measured in a cell proliferation assay using Balb/3T3 mouse embryonic fibroblast cells. The ED50 for this effect is 4.14 ng/ml.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU per µg as determined by the LAL method.
Storage:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping:	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C.
Formulation:	Supplied as a 0.2 µm filtered solution of 20mM Tris,150mM NaCl,5%Trehalose,1mM EDTA,20%glycerol, 1mM DTT,pH8.5 .
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	Cell Culture
Synonyms:	Fibroblast growth factor 9;FGF-9;Glia-activating factor;GAF;heparin-binding growth factor-9;HBGF-9;Fgf9;Fgf-9

Immunogen Information:

Sequence: Met1-Ser208

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 affects 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 lowers its activity, and increases heparin affinity which inhibits diffusion. A spontaneous mouse mutant, Eks, interferes with dimerization, resulting monomeric, diffusible FGF-9 that causes elbow and knee synostoses (joint fusions) due to FGF-9 misexpression in developing joints.