

Product datasheet for MG201152

Fgf1 (NM_010197) Mouse Tagged ORF Clone

Product data:

ACCN:

ORF Size:

Product Type:	Expression Plasmids
Product Name:	Fgf1 (NM_010197) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Fgf1
Synonyms:	Dffrx; Fam; Fgf-1; Fgfa
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
Restriction Sites:	Sgfl-Mlul
Cloning Scheme:	Cloning sites used for ORF Shuttling:

ORF

RBS

Mlu I

ACG CGT

Kozac Sgf I

Asc I

GFP Tag

Sgfl

EcoR I

Nhe I Rsr II

Hind III

NM_010197

465 bp

CGATCGC

Mlu I
 Hind III
 Nhe I
 Rsr II
 Miu I
 Not I
 Xho I
 GFP Tag

 CAAGCTTAACTAGCGACGGACGGACG
 ACG CGT ACG CGG CGC CGC GAG ATG GAG AGG GAC
 T
 R
 T
 R
 P
 L
 E
 M
 E
 S
 D

Pme I --- GAA GAA AGA GTT TAA ACGGCCGGCCGCGGAGCT - E E R V stop

BamH I Kpn I

Fse I

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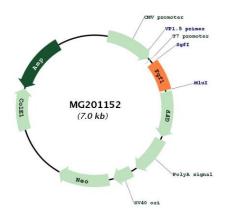
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GRIGENE Fgf1 (NM_010197) Mouse Tagged ORF Clone – MG201152	
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <u>More info</u>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	 Centrifuge at 5,000xg for 5min. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. Close the tube and incubate for 10 minutes at room temperature. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	<u>NM 010197.3, NP 034327.1</u>
RefSeq Size:	3909 bp
RefSeq ORF:	468 bp
Locus ID:	14164
UniProt ID:	<u>P61148</u>
Cytogenetics:	18 20.74 cM
Gene Summary:	Plays an important role in the regulation of cell survival, cell division, angiogenesis, cell differentiation and cell migration. Functions as potent mitogen in vitro. Acts as a ligand for FGFR1 and integrins. Binds to FGFR1 in the presence of heparin leading to FGFR1 dimerization and activation via sequential autophosphorylation on tyrosine residues which act as docking sites for interacting proteins, leading to the activation of several signaling cascades. Binds to integrin ITGAV:ITGB3. Its binding to integrin, subsequent ternary complex formation with integrin and FGFR1, and the recruitment of PTPN11 to the complex are essential for FGF1 signaling. Induces the phosphorylation and activation of FGFR1, FRS2, MAPK3/ERK1, MAPK1/ERK2 and AKT1. Can induce angiogenesis.[UniProtKB/Swiss-Prot

Function]

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Product images:



Circular map for MG201152

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