

ProQinase™ FGF-R3 G697C

fibroblast growth factor receptor 3

Recombinant Human Active Protein Kinase

HGNC Symbol: FGFR3

Synonyms: ACH, CD333, CEK2, FGFR-3, HSFGR3EX, JTK4

Product No.: 1071-0000-1

Lot: 001

Description: Human FGF-R3, C-terminal fragment, amino acids R₃₉₇-T₈₀₆ (as in [NCBI/Protein](#) entry NP_000133.1) with a G697C mutation, N-terminal GST-HIS₆ fusion protein with a 3C cleavage site, expressed in Sf9 insect cells

Product identity: FGF-R3 G697C, Lot 001, was confirmed as FGF-R3 by mass spectroscopy LC-ESI-MS/MS

Theoretical MW_{Fusion Protein}: 73,980 Da

Expression host: Sf9 insect cells

Purification: GST-Affinity Chromatography

Activation: This kinase was not activated by special procedures

Storage buffer: 50 mM HEPES pH 7.5, 100 mM NaCl, 5 mM DTT, 15 mM reduced glutathione, 20 % glycerol

Storage temperature: -80°C

For complete recovery, mix well and spin before use. Product must not be stored in diluted solutions, aliquots below 10µl are not advisable. Avoid repeated freeze-thaw cycles!

Protein concentration: 0.225 µg/µl
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

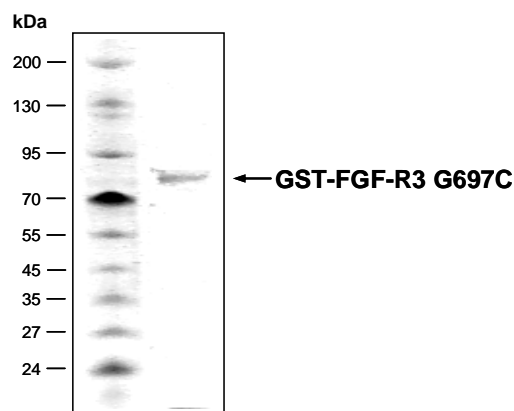
Biochemical Parameters:

Specific kinase activity (P_i transfer): 159 pmol/µg × min
ATP-K_M: 11 µM

Additional assay technology:

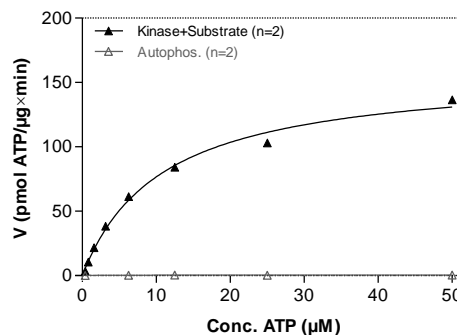
FGF-R3 G697C Lot 001 was also successfully tested by Reaction Biology for the use with the ADP-Glo™ Kinase assay from Promega ADP-Glo assay conditions may vary from radiometric assay conditions, please inquire for assay details

**FGF-R3 G697C Lot 001:
Coomassie stain**



2.0 µg GST-FGF-R3 G697C

**FGF-R3 G697C Lot 001:
Determination of V_{max} and K_M value for ATP**



- Assay conditions:
 - 60 mM HEPES-NaOH, pH 7.5
 - 3 mM MgCl₂
 - 3 mM MnCl₂
 - 3 µM Na-orthovanadate
 - 1.2 mM DTT
 - 50 µg/ml PEG_{20,000}
 - ATP (variable)
 - Substrate: TRK-C derived peptide 40 µg/ml
 - Kinase: 1 µg/ml
- Filter binding assay
 - MSPH membrane (Millipore)

ProQinase™ FGF-R3 G697C

Product No.: 1071-0000-1

GST-FGF-R3 G697C Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRLL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPPEML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAIPOID	KYLKSSKYIA	WPLQGWOATF	GGGDHPPKSD	PMGHHHHHG	RDSLEVLFCG	240
241	PLAMVRLRSP	PKKGLGSPTV	HKISRFP LKR	QVSLESNASM	SSNTPLVRIA	RLSSGEGPTL	300
301	ANVSELELPA	DPKWELSRAR	LTLGKPLGEG	CFGQVMAEA	IGIDKDRAAK	PVTVAVKMLK	360
361	DDATDKDLS	LVSEMEMMKM	IGKHKNIINL	LGACTQGGPL	YVLVEYAAKG	NLREFLRARR	420
421	PPGLDYSFDT	CKPPEEQLTF	KDLVSCAYQV	ARGMEYLASQ	KCIHRDLAAR	NVLVTEDNVM	480
481	KIADFG LARD	VHNLDYYKKT	TNGRLPVKWM	APEALFDRVY	THQSDVWSFG	VLLWEIFTLG	540
541	GSPYPCIPVE	ELFKLLKEGH	RMDKPANCTH	DLYMIMRECW	HAAPSQRPTF	KQLVEDLDRV	600
600	LTVTSTDEYL	DLSAPFEQYS	PGGQDTPSSS	SSGDDSVFAH	DLLPPAPPS	GGSR	660

1-218: GST **Red**: HIS6-tag **Green**: 3C cleavage site **blue**: FGF-R3 fragment **boxed**: G697C mutation

FGF-R3 wt ¹ Amino Acid Sequence							
1	MGAPACALAL	CVAVAIVAGA	SSESLGTEQR	VVGRAAEVPG	PEPGQEQLV	FGSGDAVELS	60
61	CPPPGGGPMG	PTVWVKDGTG	LVPSEVLVVG	PQRLQVLNAS	HEDSGAYSCR	QRLTQRVLCH	120
121	FSVRVTDAPS	SGDDEDGEDE	AEDTGVD TGA	PYWTRPERMD	KKLLAVPAAN	TVRFRCPAAG	180
181	NPTPSISWLK	NGREFRGEHR	IGGIKLRHQQ	WSLVMESVVP	SDRGNYTCVV	ENKFGSIRQT	240
241	YTLVDLERSP	HRPILQAGLP	ANQTAVLGSD	VEFHCKVYSD	AQPHIQWLKH	VEVNGSKVGP	300
301	DGTPYVTVLK	TAGANTTDKE	LEVLSLHNVT	FEDAGEYTCL	AGNSIGFSHH	SAWLVLPAE	360
361	EELVEADEAG	SVYAGILSYG	VGFFLFILVV	AAVTLCRLRS	PPKKGLGSPT	VHKISRFLPK	420
421	RQVSLESNAS	MSSNTPLVRI	ARLSSGEGPT	LANVSELELP	ADPKWELSRA	RLTLGKPLGE	480
481	GCFGQVMAE	AIGIDKDRAA	KPVTVAVKML	KDDATDKDLS	DLVSEMEMMK	MIGKHKNIIN	540
541	LLGACTQGGP	LYVLVEYAAK	GNLREFLRAR	RPPGLDYSFD	TCKPPEEQLT	FKDLVSCAYQ	600
600	VARGMEYLAS	QKCIHRDLAA	RNVLVTEDNV	MKIADFG LAR	DVHNLDYYK	TTNGRLPVKW	660
661	MAPEALFDRV	YTHQSDVWSF	GVLLEIFTL	GGSPYPCIPV	EELFKLLKEG	HRMDKPANCT	720
721	HDLYMIMREC	WHAAPSQRPT	FKQLVEDLDR	VLTVTSTDEY	LDLSAPFEQY	SPGGQDTPSS	780
781	SSSGDDSVFA	HDLLPPAPPS	SGGSRT				840

blue: FGF-R3 sequence expressed in recombinant protein **Red**: variant in recombinant protein

¹[NCBI/Protein](#) accession number NP_000133.1