

EGF-R d747-752/P753S

epidermal growth factor receptor

Recombinant Human Active Protein Kinase

HGNC Symbol: EGFR

Synonyms: ERBB, ERBB1

Product No.: 1039-0000-1

Lot: 001

Description: Human EGF-R, C-terminal fragment, amino acids H₆₇₂-A₁₂₁₀ (as in [NCBI/Protein](#) entry NP_005219.2), amino acids 747-752 deleted, P753S mutant, N-terminal GST-HIS₆ fusion protein with a 3C cleavage site, expressed in Sf9 insect cells

Product identity: EGF-R d747-752/P753S Lot 001, was confirmed as EGF-R by mass spectroscopy LC-ESI-MS/MS

Theoretical MW_{Fusion Protein}: 88,503 Da

Expression host: Sf9 insect cells/E.coli

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

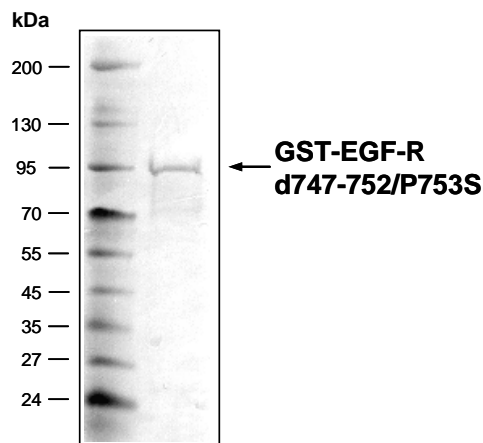
Biochemical Parameters:

Specific kinase activity (P_i transfer): 25 pmol/µg × min
ATP-K_M: 2.7 µM

Additional assay technology:

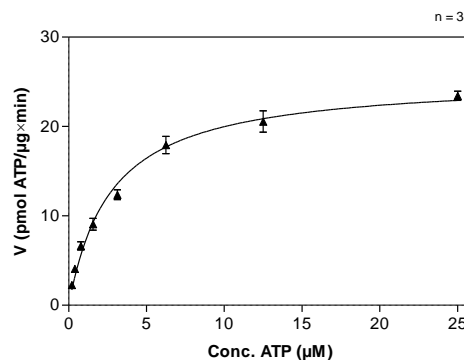
EGF-R d747-752/P753S Lot 001 was also successfully tested by ProQinase for the use with the ADP-Glo™ Kinase assay from Promega. ADP-Glo assay conditions may vary from radiometric assay conditions, please inquire for assay details

EGF-R d747-752/P753S Lot 001: Coomassie stain



1.0 µg GST-EGF-R d747-752/P753S

EGF-R d747-752/P753S 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: Poly(Glu:Tyr)_{4:1} 5 µg/ml
Kinase: 1 µg/ml
- Filter binding assay
MSFC membrane (Millipore)

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GST-EGF-R d747-752/P753S Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSM	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLP EML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAI PQID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	PMGHHHHHG	RDSLEVLFCG	240
241	PLAMGHIVRK	RTLRLQLQER	ELVEPLTPSG	EAPNQALLRI	LKETEFKKIK	VLGSGAFGTV	300
301	YKGLWIPEGE	KVKIPVAIKE	<u>SKANKEILDE</u>	AYVMASVDNP	HVCRLLGICL	TSTVQLITQL	360
361	MPPFGCLLDYV	REHKDNIGSQ	YLLNWCVQIA	KGMNYLEDNR	LVHRDLAARN	VLVKTPOHVK	420
421	ITDFGLAKLL	GAEKEYHAE	GKVPKWKMA	LESILHRIYT	HQSDVWSYGV	TVWELMTFGS	480
481	KPYDGPASE	ISSILEKGER	LPQPPICTID	VYMIMVKCWM	IDADSRPKFR	ELIIEFSKMA	540
541	RDPQRYLVIQ	GDERMHLPS	TDSNFYRALM	DEEDMDVDV	ADEYLIPQQG	FFSSPSTSRT	600
600	PLLSSLSATS	NNSTVACIDR	NGLQSCPIKE	DSFLQRYSSD	PTGALTEDSI	DDTFLPVPVE	660
661	INQSVPKRPA	GSVQNPVYHN	QPLNPAISR	PHYQPHSTA	VGNPEYLNVT	QPTCVNSTFD	720
721	SPAHWAKGS	HQISLDNDY	QQDFFPKEAK	PNGIFKGSTA	ENAEYLRVAP	QSSEFFIGA	780

1-218: GST **Red**: HIS6-tag **Green**: 3C cleavage site **blue**: EGF-R fragment **boxed**: P753S
underlined: positions flanking the deletion

EGF-R wt ¹ Amino Acid Sequence							
1	MRPSGTAGAA	LLALLAALCP	ASRALEEKV	CQGTSNKLTQ	LGT FEDHFLS	LQRMFN NCEV	60
61	VLGNLEITYV	QRNYDLSFLK	TIQEVAGYVL	IALNTVERIP	LENLQIIRGN	MYYENS YALA	120
121	VLSNYDANKT	GLKELPMRNL	QEILHGAVRF	SNNPALCNVE	SIQWRDIVSS	DFLSNM SMDF	180
181	QNHLGSCQKC	DPSCPNGSCW	GAGEENCQKL	TKIICAQQCS	GRCRGKSPSD	CCHNQCAAGC	240
241	TGPRES DCLV	CRKFRDEATC	KDTCPPMLY	NPTTYQMDVN	PEGKYSFGAT	CVKKCPRNV	300
301	VTDHGSCVRA	CGADSYEMEE	DGVRKCKKCE	GPCRKVCNGI	GIGEFKDSLS	INATNIKHF	360
361	NCTSISGDLH	ILPVAFRGDS	FTHTPPLDPQ	ELDILKTVKE	ITGFLLIQAW	PENRTDLHAF	420
421	ENLEIIRGRT	KQHGQFSLAV	VSLNITSLGL	RSLKEISDGD	VIISGNKNLC	YANTINWKKL	480
481	FGTSGQKTKI	ISNRGENSCK	ATGQVCHALC	SPEGCWGPEP	RDCVSCRNV	RGRECV DKN	540
541	LLEGEPRFV	ENSECIQCHP	ECLPQAMNIT	CTGRGPDNCI	QCAHYIDGPH	CVKTCPAGVM	600
600	GENNTLVWKY	ADAGHVCHLC	HPNCTYGCTG	PGLEGCP TNG	PKIPSIATGM	VGALLLLLV	660
661	ALGIGLFMR	RHIVRKR TLR	RLLQERELVE	PLTPSGEAPN	QALLRILKET	EFKKIKVLGS	720
721	GAFGTVYKGL	WIPEGEKVKI	PVAIKE LREA	TSPKANKEIL	DEAYVMASVD	NPHVCRL LGI	780
781	CLTSTVQLIT	QLMPFGCLLD	YVREHKDNIG	SOYLLNWCVQ	IAKGMNYLED	RRLVHRDLAA	840
841	RNVLVKTPQH	VKITDFGLAK	LLGAEKEYH	AEGGKVPKWK	MALESILHRI	YTHQSDVWSY	900
901	GVTWELMTF	GSKPYDGIPA	SEISSILEKG	ERLPQPPICT	IDVYMIMVKC	WMIDADSRPK	960
961	FRELIIEFSK	MARDPQRYLV	IQDERMHL P	SPTDSNFYRA	LMDEEDMDDV	VDADEYLIPQ	1020
1021	QGFFSSPSTS	RTPLLSSLSA	TSNNSTVACI	DRNGLQSCPI	KEDSFLQRY	SDPTGALTED	1080
1081	SIDDTFLPVP	EYINQSVPKR	PAGSVQNPVY	HNQPLNPAPS	RDPHYQD PHS	TAVGNPEYLN	1140
1141	TVQPTCVNST	FDSPAHWAKQ	GSHQISLDNP	DYQQDFFPKE	AKPNGIFKGS	TAENAEYLRV	1200
1201	APQSSEFFIGA						1260

blue: EGF-R sequence expressed in recombinant protein **Red**: variant in recombinant protein

¹NCBI/Protein accession number NP_005219.2

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