

## EGF-R d746-750

epidermal growth factor receptor

Recombinant Human Active Protein Kinase

HGNC Symbol: EGFR

Synonyms: ERBB, ERBB1

Product No.: 1037-0000-1

Lot: 004

**Description:** Human EGF-R, C-terminal fragment, amino acids M<sub>672</sub>-A<sub>1210</sub> (as in [NCBI/Protein](#) entry NP\_005219.2) with a deletion of amino acids E<sub>746</sub>-A<sub>750</sub>, N-terminal GST-HIS<sub>6</sub> fusion protein with a 3C cleavage site, expressed in Sf9 insect cells

**Product identity:** EGF-R d746-750 Lot 004, was confirmed as EGF-R by mass spectroscopy LC-ESI-MS/MS

**Theoretical MW<sub>Fusion Protein</sub>:** 88,572 Da

**Expression host:** Sf9 insect cells

**Purification:** GST-Affinity Chromatography

**Activation:** in vitro auto activation

**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:** 0.496 µg/µl

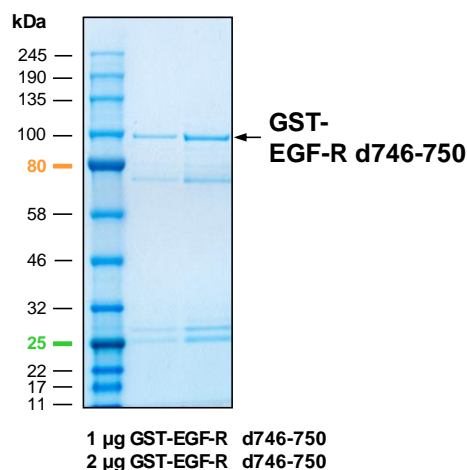
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

**Biochemical Parameters:**

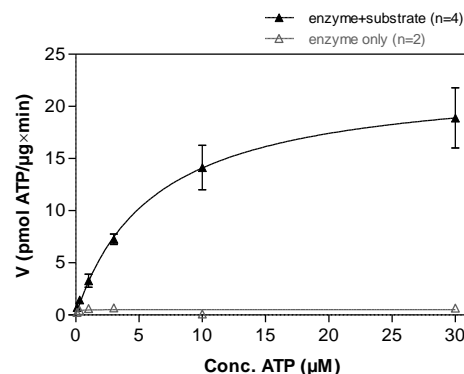
Specific kinase activity (P<sub>i</sub> transfer): 23 pmol/µg × min

ATP-K<sub>M</sub>: 6.1 µM

### EGF-R d746-750 Lot 004: Coomassie stain



### EGF-R d746-750 Lot 004: Determination of V<sub>max</sub> and K<sub>M</sub> value for ATP



#### Determination of K<sub>M</sub> value & Specific activity:

- Assay conditions:
  - 60 mM HEPES-NaOH, pH 7.5
  - 3 mM MgCl<sub>2</sub>
  - 3 mM MnCl<sub>2</sub>
  - 3 µM Na-orthovanadate
  - 1.2 mM DTT
  - 50 µg/ml PEG<sub>20,000</sub>
  - ATP (variable)
  - Substrate: Poly(Glu/Tyr)<sub>4:1</sub> 5 µg/ml
  - Kinase: 1 µg/ml
- Filter binding assay
- MSFC membrane (Millipore)

#### Additional assay technology:

EGF-R d746-750 Lot 004 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.

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## EGF-R d746-750

Product No.: 1037-0000-1

GST-EGF-R d746-750 Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSM	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLP	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAI	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	PMGHHHHHG	RDSLEVLFCG	240
241	PLAMGHIVRK	RTLRLQLQER	ELVEPLTPSG	EAPNQALLRI	LKETEFKKIK	VLGSGAFGTQ	300
301	YKGLWIPEGE	KVKIPVAIKT	SPKANKEILD	EAYVMASVDN	PHVCRLLGIC	LTSTVQLITQ	360
361	LMPFGCLLDY	VREHKDNIGS	QYLLNWCVQI	AKGMNYLEDR	RLVHRDLAAR	NVLVKTPQHV	420
421	KITDFGLAKL	LGAEKEYHA	EGGKVPKWM	ALESILHRIY	THQSDVWSYG	VTWELMTFG	480
481	SKPYDGIPAS	EISSILEKGE	RLPQPPICTI	DVYMIMVKCW	MIDADSRPKF	RELIIEFSKM	540
541	ARDPQRYLVI	QGDERMHLPS	PTDSNFYRAL	MDEEDMDDVV	DADEYLIPQ	GFFSSPSTS	600
600	TPLLSSLSAT	SNNSTVACID	RNGLQSCPIK	EDSFLQRYSS	DPTGALTEDS	IDDTFLPVE	660
661	YINQSVPKRP	AGSVQNPVYH	HNQPLNPAPS	RDPHYQPHST	AVGNPEYLN	VQPTCVNSTF	720
721	DSPAHWQKQ	GSHQISLDNDP	YQQDFFPKEA	KPNGIFKGST	AENAAYLRVA	PQSSEFIGA	780

1-218: GST Red: HIS6-tag Green: 3C cleavage site blue: EGF-R fragment boxed: position of the d746-750 deletion

EGF-R wt <sup>1</sup> Amino Acid Sequence							
1	MRPSGTAGAA	LLALLAALCP	ASRALEEKV	CQGTSNKL	TQ LGTFEDHFLS	LQRMFN	NCEV 60
61	VLGNLEITYV	QRNYDLSFLK	TIQEVAGYVL	IANTVERIP	LENLQIIRGN	MYYEN	SYALA 120
121	VLSNYDANKT	GLKELPMRNL	QEILHGAVRF	SNNPALCNVE	SIQWRDIVSS	DFLSN	MMDF 180
181	QNHGSCQKC	DPSCPNGSCW	GAGEENCQKL	TKIICAQCS	GRCRGKSPSD	CCHNQ	CAAGC 240
241	TGPRES	DCLV CRKFRDEATC	KDTCPLMLY	NPTTYQMDVN	PEGKYSFGAT	CVKKC	PRNYV 300
301	VTDHGSCVRA	CGADSYEMEE	DGVRKCKKCE	GPCRKVCNGI	GIGEFKDSLS	INATN	IKHFK 360
361	NCTSISGDLH	ILPVAFRGDS	FTHTPPLDQ	ELDILKTVKE	ITGFLLIQAW	PENRT	DLHAF 420
421	ENLEIIRGRT	KQHGGQFSLAV	VSLNITSLGL	RSLKEISDGD	VIISGNK	NLC YANTIN	WKKL 480
481	FGTSGQKTKI	ISNRGENSCK	ATGQVCHALC	SPEGCWGPEP	RDCVSCR	NVS RGRECV	DKCN 540
541	LLEGE	PREFV ENSECIQCHP	ECLPQAMNIT	CTGRGPDNCI	QCAHYIDGPH	CVKTC	PAGVM 600
600	GENNTLVW	KY ADAGHVCHLC	HPNCTYGCTG	PGLEGCPTNG	PKIPSIATGM	VGALL	LLLVLV 660
661	ALGIGL	FMRR RHIVRKRTL	RLLQERELVE	PLTPSGEAPN	QALLRILKET	EFKKIK	VLGS 720
721	GAFGT	VYKGL WIPEGEKVKI	PVAIKELREA	TSPKANKEIL	DEAYVMASVD	NPHVC	RLLGI 780
781	CLTSTV	QLIT QLMPFGCLLD	YVREHKDNIG	SQYLLNWCVQ	IAKGMNYLED	RRLVHR	DLAA 840
841	RNVLVK	TPQH VKITDFGLAK	LLGAEKEYH	AEGGKVPK	W MALESILHRI	YTHQSD	VWSY 900
901	GVTWEL	MTF GSKPYDGIPA	SEISSILEKG	ERLPQPPICT	IDVYMIMVKC	WMIDAD	SRPK 960
961	FRELIIE	FSK MARDPQRYLV	IQGDERMHL	SPTDSNFYRA	LMDEEDMDDV	VDAEYL	IPQ 1020
1021	QGFFSS	PSTS RTPLLSSLSA	TSNNSTVACI	DRNGLQSCPI	KEDSFLQRY	SDPTGA	LTED 1080
1081	SIDDTFL	PVP EYINQSVPKR	PAGSVQNPVY	HNQPLNPAPS	RDPHYQPHS	TAVGN	PEYLN 1140
1141	TVQPTCV	NST FDSPAHWQK	GSHQISLDNP	DYQQDFFPKE	AKPNGIFKGS	TAENA	EYLRV 1200
1201	APQSSE	FIGA					1260

blue: EGF-R sequence expressed in recombinant protein Red: deleted in recombinant protein

<sup>1</sup>NCBI/Protein accession number NP\_005219.2

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