EGFR (del746-750, T790M, C797S), GST-Tag, His-Tag Recombinant

Product Information

Description:	Recombinant human EGFR (epidermal growth factor receptor) encompassing tyrosine kinase domain amino acids 668-1210(end) with a deletion of amino acids 746 to 750 and mutations T790M and C797S. This construct contains an N-terminal GST-tag and a C-terminal His-tag (6xHis). This protein was affinity purified.
Background:	EFGR (epidermal growth factor receptor), also known as ErbB-1 and HER1, is the cell- surface receptor for members of the epidermal growth factor family, such as TGFα (transforming growth factor alpha) and belongs to the ErbB family of receptors. Overexpression and/or hyperactivation of EGFR is associated with several human cancers such as lung, glioblastoma, and epithelial tumors of the neck and head, whereas EGFR deficiency is linked to Alzheimer's. After binding to its ligand, EGFR dimerizes and undergoes auto-phosphorylation, resulting in activation of signal transduction cascades that involve proteins such as JNK (c-jun N-terminal kinases) and AKT (protein kinase B). Its role as an oncogene has led to the development of inhibitors as cancer therapy.
Species:	Human
Construct:	EGFR (GST-668-1210(end)-His)
Mutations:	del746-750, T790M, C797S
Concentration:	0.36 mg/ml
Expression System:	Sf9
Purity:	66%
Format:	Aqueous buffer solution.
Formulated In:	40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 0.04% Tween-20, 20% glycerol, and 3 mM DTT
MW:	87 kDa
Genbank Accession:	NM_005228
Stability:	At least 6 months at -80°C.
Storage:	-80°C
Instructions for Use:	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
Assay Conditions:	Assay was done in Kinase buffer containing 1 mM DTT using Poly-(Glu4:Tyr) substrate (0.2 mg/ml) and 20 µM ATP. Reaction was done at 30°C for 45 minutes. Amount of ATP transferred was calculated using Kinase-Glo™ reagent (Promega).
Applications:	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

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Quality Control Data

