Phospho-EGFR Sampler Kit

E051029

Kits Includes	Cat.	Quantity	Application	Reactivity	Source
EGFR(Phospho-Tyr1172) Antibody	E011220-1	50μg/50μl	IHC, WB	Human, Mouse, Rat	Rabbit
EGFR (Phospho-Tyr1092) Antibody	E011081-1	50μg/50μl	IHC, WB	Human, Mouse, Rat	Rabbit
EGFR (Phospho-Tyr1197) Antibody	E011228-1	50μg/50μl	IHC, WB	Human, Mouse, Rat	Rabbit
EGFR (Phospho-Tyr869) Antibody	E011229-1	50μg/50μl	WB	Human, Mouse, Rat	Rabbit
EGFR (phospho-Tyr1110) Antibody	E011264-1	50μg/50μl	WB	Human, Mouse, Rat	Rabbit

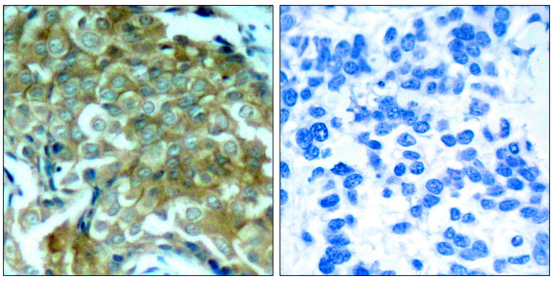
EGFR is a transmembrane glycoprotein that is a member of the protein kinase superfamily. This protein is a receptor for members of the epidermal growth factor family. **EGFR** is a cell surface protein that binds to epidermal growth factor. Binding of the protein to a ligand induces receptor dimerization and tyrosine autophosphorylation and leads to cell proliferation. Mutations in this gene are associated with lung cancer. Receptor for EGF, but also for other members of the EGF family, as TGF-alpha, amphiregulin, betacellulin, heparin-binding EGF-like growth factor, GP30 and vaccinia virus growth factor. Is involved in the control of cell growth and differentiation. Phosphorylates MUC1 in breast cancer cells and increases the interaction of MUC1 with SRC and CTNNB1/beta-catenin. Isoform 2 may act as an antagonist of EGF action.

The epidermal growth factor receptor (EGFR) is a receptor tyrosine kinase of the ErbB family. Four members of the ErbB family have been identified; EGFR (ErbB1, HER1), ErbB2 (HER2), ErbB3 (HER3) and ErbB4 (HER4). EGFR signaling is initiated by ligand binding to the extracellular ligand binding domain. This initiates receptor homo-/hetero-dimerization and autophosphorylation by the intracellular kinase domain, resulting in receptor activation. Following activation, phosphorylation of cytoplasmic substrates occurs and a signaling cascade is initiated that drives many cellular responses, including changes in gene expression, cytoskeletal rearrangement, anti-apoptosis and increased cell proliferation. Phosphorylation of Ser-695 is partial and occurs only if Thr-693 is phosphorylated. Monoubiquitinated and polyubiquitinated upon EGF stimulation; which does not affect tyrosine kinase activity or signaling capacity but may play a role in lysosomal targeting. Polyubiquitin linkage is mainly through 'Lys-63', but linkage through 'Lys-48', 'Lys-11' and 'Lys-29' also occur.

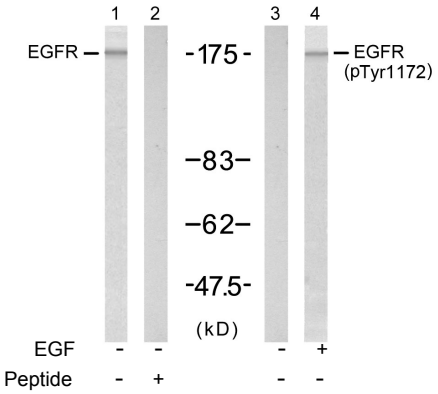
EGFR (Phospho-Tyr1172) Antibody

E011220

Catalog Number: E011220-1, E011220-2
Amount: 50μg/50μl, 100μg/100μl
Swiss-Prot No. : P00533
Form of Antibody: Rabbit IgG in phosphate buffered saline (without Mg^{2+} and Ca^{2+}), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage/Stability: Store at -20°C/1 year
Immunogen: The antiserum was produced against synthesized phosphopeptide derived from human EGFR around the phosphorylation site of tyrosine 1172 (P-D-Y^{P}-Q-Q).
Purification: The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatogramphy using non-phosphopeptide corresponding to the phosphorylation site.
Specificity/Sensitivity: EGFR (phospho-Tyr1172) antibody detects endogenous levels EGFR only when phosphorylated at tyrosine 1172.
Reactivity: Human, Mouse, Rat
Applications: WB: 1:500~1:1000 IHC: 1:50~1:100
References:
Noguchi T, et al. (1994) Mol Cell Biol 14(10): 6674-6682
Doherty JK, et al. (1999) Proc Natl Acad Sci U S A 96(19): 10869-10874
Kanner SB, et al. (1991) Mol Cell Biol 11(2): 713-720
Wu TT, et al. (1998) Mol Biol Cell 9(7): 1661-1674
O'Rourke DM, et al. (1997) Proc Natl Acad Sci U S A 94(7): 3250-3255



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue, using EGFR (phospho-Tyr1172) antibody (E011220).

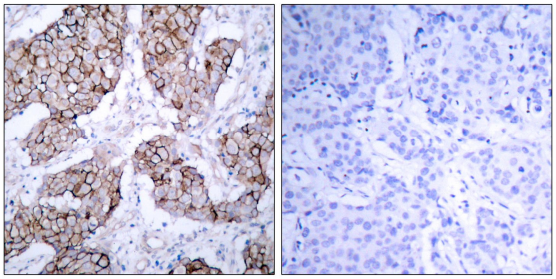


Western blot analysis of extract from A431 cell untreated or treated with EGF (200ng/ml, 5min), using EGFR (Ab-1172) antibody (E021213, Lane 1 and 2) and EGFR (phospho-Tyr1172) antibody (E011220, Lane 3 and 4).

EGFR (Phospho-Tyr1092) Antibody

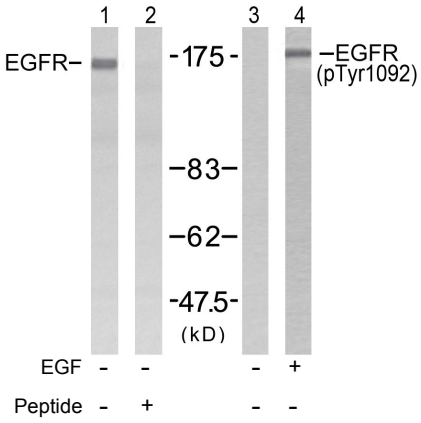
E011081

Catalog Number: E011081-1, E011081-2
Amount: 50μg/50μl, 100μg/100μl
Form of Antibody: Rabbit IgG in phosphate buffered saline (without Mg^{2+} and Ca^{2+}), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage/Stability: Store at -20°C/1 year
Immunogen: The antiserum was produced against synthesized phosphopeptide derived from human EGFR around the phosphorylation site of tyrosine1092 (P-E-Y^{P}-I-N).
Purification: The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatogramphy using non-phosphopeptide corresponding to the phosphorylation site.
Specificity/Sensitivity: EGFR (phospho-tyr1092) antibody detects endogenous levels of EGFR only when phosphorylated at tyrosine 1092.
Reactivity: Human, Mouse, Rat
Applications: WB: 1:500~1:1000 IHC: 1:50~1:100
Swiss-Prot No. : P00533
References:
Buerger C, et al. (2003) J Biol Chem; 278(39): 37610-21.
Wang XQ, (2003) J Biol Chem; 278(49): 48770-8.
Saito T, et al. (2004) Endocrinology; 145(9): 4232-43.
Pao W, et al. (2004) Proc Natl Acad Sci U S A; 101(36): 13306-11.



P-Peptide - +

Immunohistochemical analysis of paraffin- embedded human breast carcinoma tissue using EGFR (phospho-Tyr1092) antibody (E011081).

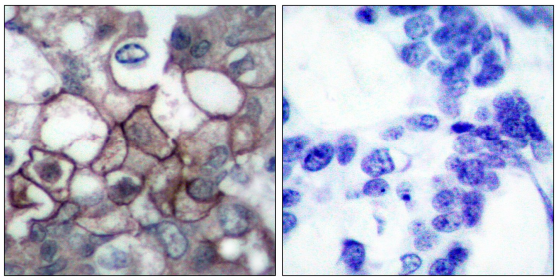


Western blot analysis of extracts from HUVEC cells using EGFR (Ab-1092) antibody (E021074, Lane 1 and 2) and EGFR (phospho-Tyr1092) antibody (E011081, Lane 3 and 4).

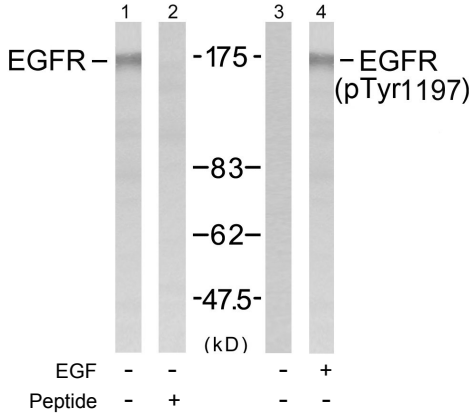
EGFR (Phospho-Tyr1197) Antibody

E011228

Catalog Number: E011228-1, E011228-2
Amount: 50μg/50μl, 100μg/100μl
Swiss-Prot No. : P00533
Form of Antibody: Rabbit IgG in phosphate buffered saline (without Mg^{2+} and Ca^{2+}), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage/Stability: Store at -20°C/1 year
Immunogen: The antiserum was produced against synthesized phosphopeptide derived from human EGFR around the phosphorylation site of tyrosine 1197 (A-E-Y^P-L-R).
Purification: The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatogramphy using non-phosphopeptide corresponding to the phosphorylation site.
Specificity/Sensitivity: EGFR (phospho-Tyr1197) antibody detects endogenous levels of EGFR only when phosphorylated at tyrosine 1197
Reactivity: Human, Mouse, Rat
Applications: WB: 1:500~1:1000 IHC: 1:50~1:100
References:
Corbalan-Garcia S, et al. (1996) Mol Cell Biolt; 16(10): 5674-5682
Kanner SB, et al. (1991) Mol Cell Biol; 11(2): 713-720
Wu TT, et al. (1998) Mol Biol Cell; 9(7): 1661-1674
O'Rourke DM, et al. (1997) Proc Natl Acad Sci U S A; 94(7): 3250-3255
Goldstein DJ, et al. (1994) J Virol; 68(7): 4432-4441



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue, using EGFR (phospho-Tyr1197) antibody (E011228).

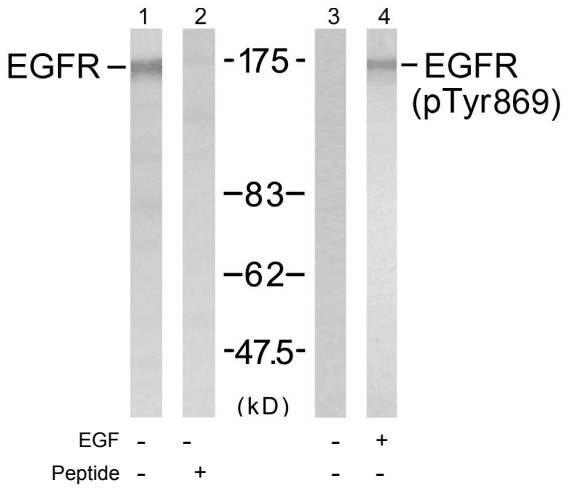


Western blot analysis of extract from A431 cells untreated or treated with EGF (200ng/ml, 5min), using EGFR (Ab-1197) antibody (E021221,Lane 1 and 2) and EGFR (phospho-Tyr1197) antibody (E011228, Lane 3 and 4).

EGFR (Phospho-Tyr869) Antibody

E011229

Catalog Number: E011229-1, E011229-2
Amount: 50μg/50μl, 100μg/100μl
Swiss-Prot No. : P00533
Form of Antibody: Rabbit IgG in phosphate buffered saline (without Mg^{2+} and Ca^{2+}), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage/Stability: Store at -20°C/1 year
Immunogen: The antiserum was produced against synthesized phosphopeptide derived from human EGFR around the phosphorylation site of tyrosine 869 (K-E-Y^P-H-A).
Purification: The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatogramphy using non-phosphopeptide corresponding to the phosphorylation site.
Specificity/Sensitivity: EGFR (phospho-Tyr869) antibody detects endogenous levels of EGFR only when phosphorylated at tyrosine 869.
Reactivity: Human, Mouse, Rat
Applications: WB: 1:500~1:1000
References:
Inoue A, et al. (2005) PLoS Med; 2(1): e13
Sun H, et al. (2004) EMBO J; 23(1): 100-110
Kanner SB, et al. (1991) Mol Cell Biol; 11(2): 713-720
Wu TT, et al. (1998) Mol Biol Cell; 9(7): 1661-1674
O'Rourke DM, et al. (1997) Proc Natl Acad Sci U S A; 94(7): 3250-3255
Goldstein DJ, et al. (1994) J Virol; 68(7): 4432-4441

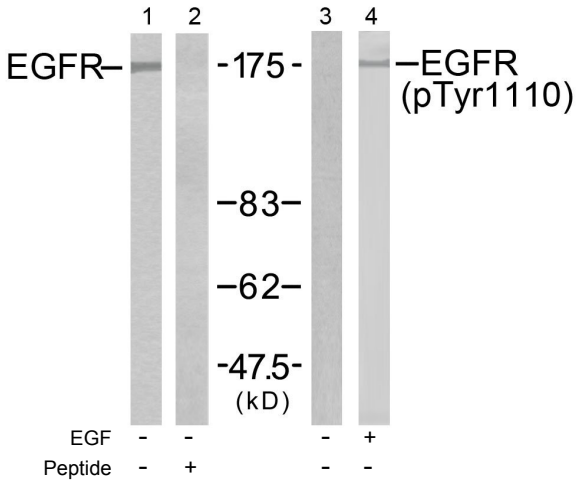


Western blot analysis of extract from A431 cells untreated or treated with EGF (200ng/ml, 5min), using EGFR (Ab-869) antibody (E021222, Lane1 and 2) and EGFR (phospho-Tyr869) antibody (E011229, Lane 3 and 4).

E011264

EGFR (Phospho-Tyr1110) Antibody

Catalog Number: E011264-1, E011264-2
Amount: 50μg/50μl, 100μg/100μl
Swiss-Prot No. : P00533
Form of Antibody: Rabbit IgG in phosphate buffered saline (without Mg^{2+} and Ca^{2+}), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage/Stability: Store at -20°C/1 year
Immunogen: The antiserum was produced against synthesized phosphopeptide derived from human EGFR around the phosphorylation site of tyrosine 1110 (P-V-Y^{P}-H-N).
Purification: The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.
Specificity/Sensitivity: EGFR (phospho-Tyr1110) antibody detects endogenous levels of EGFR only when phosphorylated at tyrosine 1110.
Reactivity: Human, Mouse, Rat
Applications: WB: 1:500~1:1000
References:
Kaisa Erjala, et,al. (2006) Clin. Cancer Res Jul 2006; 12: 4103 - 4111.
Judit Anido, et,al. (2003) Clin. Cancer Res ; 9: 1274.
Julian Andreev, et,al. (2001) J. Biol. Chem ; 276: 20130 - 20135.
Suil Kim, et,al. (2002) Am J Physiol Lung Cell Mol Physiol, ; 283: 67.



Western blot analysis of extracts from A431 cells untreated or treated with EGF (200ng/ml, 5min), using EGFR (Ab-1110) antibody (E021256, Lane 1 and 2) and EGFR (phospho-Tyr1110) antibody (E011264, Lane 3 and 4).