Catalog No. LF-PA0082

POLYCLONAL ANTIBODY

Anti-phospho-EGFR (Y1173)/Her2(Y1248)

Background : The epidermal growth factor receptor (EGFR) is a transmembrane receptor tyrosine kinase of the ErbB (also known as HER) family in which four members have been identified: EGFR (ErbB1), HER2/Neu (ErbB2), HER3 (ErbB3), and HER4 (ErbB4). All four erbB receptors are composed of an extracellular ligand-binding region consisting of glycosylated domains, a transmembrane domain containing a single hydrophobic anchor sequence, an intracellular region containing the catalytic tyrosine kinase domain, and a carboxyl-terminal region containing several tyrosine residues that become phosphorylated after receptor activation.
The epidermal growth factor receptor (EGFR) signaling pathway is one of the most important pathways that regulate growth, survival, proliferation, and differentiation in mammalian cells. EGFR and other members of the erbB family form either homodimers or heterodimers upon ligand binding, resulting in conformational changes that allow activation of protein kinases and transphosphorylation of key tyrosine residues within the carboxyl-terminal domain. After the induction of tyrosine phosphorylation, some signaling pathways appear to start with the recognition of the C-terminal phosphotyrosines by appropriate adaptor or signaling molecules.
The aberrant activation of the EGFR leads to enhanced proliferation and other tumor-promoting activities. Several mechanisms lead to aberrant receptor activation, including receptor overexpression, gene amplification, activating mutations, overexpression of receptor ligands, and/or loss of their negative regulatory mechanisms.
The epidermal growth factor receptor (EGFR) has been extensively investigated as a target for anti-neoplastic therapy. Anti-EGFR antibodies that interfere with ligand-dependent receptor activation have shown clinical activity in a variety of solid tumors.

Immunogen : Synthetic peptide

Host : Rabbit

Type : Polyclonal Antibody

Isotype : IgG

Size : 100 µℓ

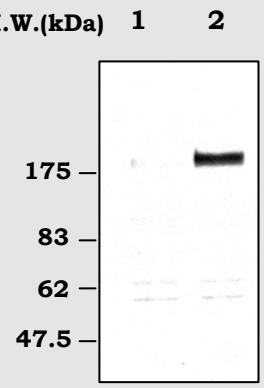
Composition : Hepes with 0.15M NaCl, 0.01% BSA, 0.03% sodium azide, and 50% glycerol

Positive control : A431 cell lysate treated with EGF

Storage : Store for 1 year at –20℃ from date of shipment.

Species cross reactivity

Human	Mouse	Rat
+	NT	NT



Immunoblot Analysis of cell lysates
Lane 1 : A431 cell lysate
Lane 2 : A431 cell lysate treated with EGF

Applications :

Western Blotting (1:2000)

Background Reference:

1) Camp E.R. et al., 2005, Clin Cancer Res. 11:397-405
2) Baselga J and Arteaga C.L., 2005, J Clin Oncol. 23: 2445-2459
3) Oda K. et al., 2005, Mol Syst Biol. 1-17
4) Jorissen R.N. et al., 2003, Exp Cell Res. 284:31-53
5) McInnes C and Sykes B.D., 1997, Biopolymer. 43: 339-366

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