



Anti-EGFR (pTyr 869)

CATALOG No: 54339-025

BACKGROUND

The epidermal growth factor receptor (EGFR), belongs to a family of receptor tyrosine kinase in mammals, which is composed of four members: EGFR (ErB1), ErB2, ErB3, and ErB4 (1). EGFR is a 133 kDa trans-membrane glycoprotein (1). It consists of an extracellular ligand binding domain, a single α -helical transmembrane pass, an intracellular tyrosine kinase domain, and a COOH-terminal region that contains auto-phosphorylation sites (2). The binding of specific polypeptide ligands, including EGF, transforming growth factor- α , jcellulin, heparin-binding EGF, epiregulin, or amphiregulin, results in phosphorylation of multiple tyrosine residues in the COOH-terminal tail, such as tyrosine Y869, Y1016, Y1092, Y1110, Y1125, Y1172, Y1197, etc. The binding of phosphorylated EGFR tyrosines with downstream signaling proteins initiates multiple signaling cascades that culminate in cell proliferation, migration, protein secretion, differentiation and/or oncogenesis (3).

SOURCE

Rabbit anti-EGFR (pTyr 869) polyclonal antibody was raised against a synthetic peptide corresponding to the tyrosine-phosphorylated site of 869 of human EGFR. This sequence is identical in human, mouse, rat, dog, horse, pig, bovine, monkey and chimpanzee.

REACTIVITY

This epitope affinity purified rabbit polyclonal antibody is specific to human EGFR at a phosphorylation site of Tyrosine 869. The antibody was evaluated by Western blot and dot blot. By western blot, an immunoreactive protein band at 133 kDa was observed from A431 whole cell lysate. By dot blot assay, this antibody only recognized the tyrosine phosphorylated EGFR Y869, not the other phosphorylated sites or non-related phosphopeptides.

APPLICATION

The following concentration ranges are recommended starting points for this product.

Western Blot: 0.5-2.0 μ g/ml

Immunoprecipitation*: 3.0 μ g/extract from 10^7 cells
(*Recommended but not tested)

This product is for in vitro research purposes only.

STORAGE

The antibody is supplied as an epitope affinity purified rabbit IgG, 25 μ g in 125 μ l (0.2 mg/ml) of 1X PBS (pH 7.4) containing 0.05% Sodium Azide. Store at 2-8 °C for up to 1 year from the date of shipment. Avoid repeated freeze thaw cycles.

REFERENCES

1. Ullrich, A. et al. Nature 309, 418 (1984).
2. Wells, A. Int J Biochem Cell Biol 31, 637 (1999).
3. Ullrich, A. et al. Cell 61, 203 (1990).

