

## 12-4068: Phospho-EGFR (Tyr1068) (Clone: E5) rabbit mAb

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	EGFRY1068-E5
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human, Mouse, Rat
<b>Conjugate :</b>	Unconjugated
<b>Format :</b>	Purified
<b>Alternative Name :</b>	avian erythroblastic leukemia viral (v-erb-b) oncogene homolog; cell growth inhibiting protein 40; cell proliferation-inducing protein 61; EGFR; Epidermal growth factor receptor; epidermal growth factor receptor (erythroblastic leukemia viral (v-erb-b) oncogene homolog, avian); ERBB; ERBB1; HER1; mENA; PIG61; Proto-oncogene c-ErbB-1; Receptor tyrosine-protein kinase erbB-1
<b>Isotype :</b>	Rabbit IgG1k
<b>Immunogen Information :</b>	A synthetic phospho-peptide corresponding to residues surrounding Tyr1068 of human phospho EGFR.

### Description

The epidermal growth factor receptor (EGFR; ErbB-1; HER1 in humans) is a transmembrane protein that is a receptor for members of the epidermal growth factor family (EGF family) of extracellular protein ligands (1). EGFR (erbB-1) is closely related to other members of the ErbB family of receptors: HER2/neu(ErbB-2), HER3 (ErbB-3) and HER4 (ErbB-4). In many cancer types, mutations affecting EGFR expression or activity could result in cancer (2). Overexpression of EGFR is associated with the development of a wide variety of tumors. Interruption of EGFR signaling, either by blocking EGFR binding sites on the extracellular domain of the receptor or by inhibiting intracellular tyrosine kinase activity, can prevent the growth of EGFR-expressing tumors and improve the patient's condition. EGFR is activated by the binding of its ligands including EGF and dimerization stimulates its intrinsic intracellular protein-tyrosine kinase activity. Activation of EGFR leads to autophosphorylation of tyrosine (Tyr) residues; Tyr992, Tyr1045, Y1068, Tyr1148, and Tyr1173 in the C-terminal domain.

### Product Info

<b>Amount :</b>	20 µl / 200 µl
<b>Content :</b>	1X PBS, 0.02% NaN <sub>3</sub> , 50% Glycerol, 0.1% BSA
<b>Storage condition :</b>	Store at -20°C. Avoid repeated freeze and thaw cycles.

### Application Note

1 µg/mL - 0.001 µg/mL. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information.(0.5mg/ml)

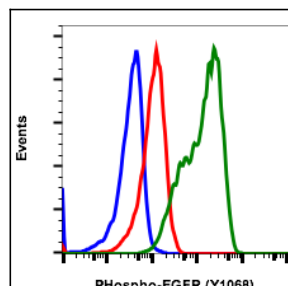


Fig-1: Flow cytometric analysis of K562 cells secondary antibody only negative control (blue) or untreated (red) or treated with EGF and pervanadate (green) using Phospho-EGFR (Tyr1068) antibody at 0.01 µg/mL EGFRY1068-E5.

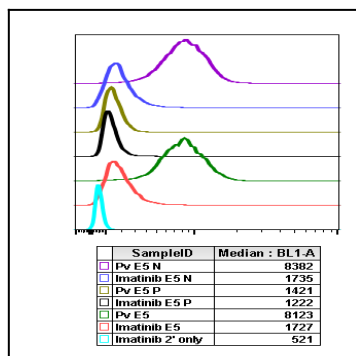


Fig 2 : Peptide blocking flow cytometric analysis of HeLa cells secondary antibody only negative control (light blue) or treated with imatinib (red) or with pervanadate (green) or imatinib and blocked with phospho-peptide (black) or pervanadate and blocked with phospho peptide (gold) or imatinib and blocked with non-phospho peptide (dark blue) or pervanadate and blocked with non-phospho peptide (purple) using Phospho-EGFR (Tyr1068) antibody EGFRY1068-E5 at 0.01µg/mL.

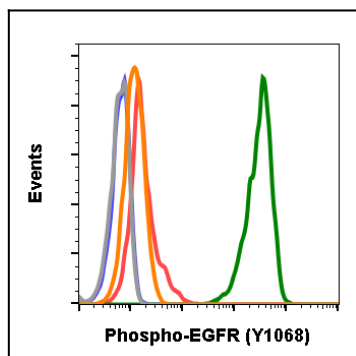


Fig-3: Flow cytometric analysis of 3T3 cells secondary antibody only (blue) treated with imatinib (grey) or pervanadate (orange) with 0.1 µg/mL of isotype control or imatinib (red) or pervanadate (green) using 0.1 µg/mL of Phospho-EGFR (Tyr1068) antibody EGFRY1068-E5 (green).

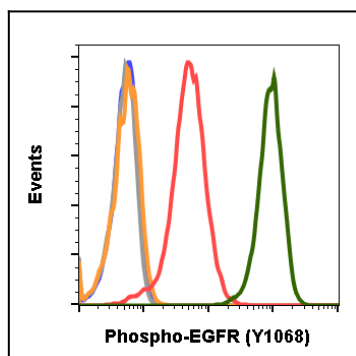


Fig-4: Flow cytometric analysis of HeLa cells secondary antibody only (blue) treated with imatinib (grey) or pervanadate (orange) with 0.1 µg/mL of isotype control or imatinib (red) or pervanadate (green) using 0.1 µg/mL of Phospho-EGFR (Tyr1068) antibody EGFRY1068-E5 (green).

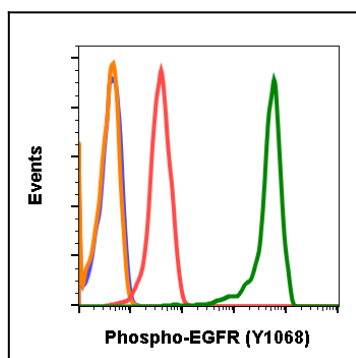


Fig-5: Flow cytometric analysis of C6 cells secondary antibody only (blue) treated with imatinib (grey) with 0.1 µg/mL of isotype control or imatinib (red) or pervanadate (green) using 0.1 µg/mL of Phospho-EGFR (Tyr1068) antibody EGFRY1068-E5 (green).

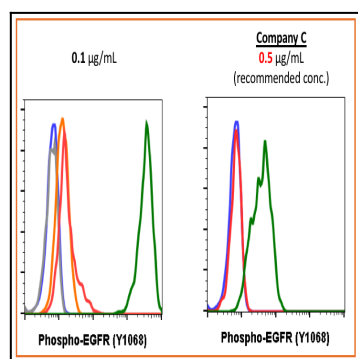


Fig-6: Flow cytometric analysis of 3T3 cells secondary antibody only (blue) treated with imatinib (grey) or pervanadate (orange) with 0.1 µg/mL of isotype control or imatinib (red) or pervanadate (green) using 0.1 µg/mL of Phospho-EGFR (Tyr1068) antibody EGFRY1068-E5 or Company C antibody at 0.5µg/mL (suggested concentration by the manufacturer).