

DESCRIPTION

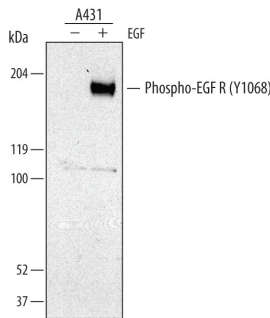
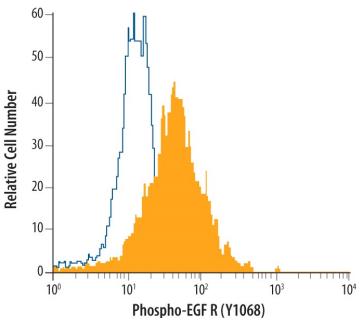
Species Reactivity	Human
Specificity	Detects human EGFR phosphorylated at Y1068.
Source	Monoclonal Mouse IgG _{2A} Clone # 338324
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Phosphopeptide containing human EGFR Y1068 site
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Intracellular Staining by Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Western Blot</p>  <p>Detection of Human Phospho-EGFR (Y1068) by Western Blot. Western blot shows lysates of A431 human epithelial carcinoma cell line untreated (-) or treated (+) with 100 ng/mL Recombinant Human EGF (Catalog # 236-EG) for 5 minutes. PVDF membrane was probed with 1 µg/mL of Human Phospho-EGFR (Y1068) Monoclonal Antibody (Catalog # MAB3570), followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Phospho-EGFR (Y1068) at approximately 190 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Intracellular Staining by Flow Cytometry</p>  <p>Detection of Phospho-EGFR in EGF-treated A431 Human Cell Line by Flow Cytometry. A431 human epithelial carcinoma cell line was untreated (open histogram) or treated for 5 minutes with 100 ng/mL Recombinant Human EGF (Catalog # 236-EG, filled histogram) then stained with Human Phospho-EGFR (Y1068) Monoclonal Antibody (Catalog # MAB3570), followed by Phycoerythrin-conjugated Anti-Mouse IgG F(ab')₂ Secondary Antibody (Catalog # F0102B). Mouse IgG_{2A} (Catalog # MAB003, data not shown) was used as an isotype control. To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Epidermal growth factor receptor (EGFR, also known as ErbB1 and HER1) is the founding member of the ErbB family of receptor tyrosine kinases. Ligand binding induces receptor dimerization and autophosphorylation on multiple tyrosine residues. Phosphorylation at Tyr 1068 allows binding of the SH2 domain of the cytosolic adaptor Grb2. This binding results in Ras activation.