

## APC anti-human EGFR Antibody

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| <b>Catalog# / Size</b>   | 386307 / 25 tests<br>386308 / 100 tests  |
| <b>Clone</b>             | A21043C  |
| <b>Regulatory Status</b> | RUO  |
| <b>Other Names</b>       | Proto-oncogene c-ErbB-1, Receptor tyrosine-protein kinase erbB-1, HER1   |
| <b>Isotype</b>           | Mouse IgG1, $\kappa$   |
| <b>Description</b>       | Epidermal growth factor receptor (EGFR) is a transmembrane glycoprotein and member of the protein kinase superfamily that regulates cell growth and differentiation. EGFR binds EGF, TGF- $\alpha$ , amphiregulin, betacellulin, heparin-binding EGF-like growth factor, GP30, and vaccinia virus growth factor - all members of the EGF family. Ligand binding induces EGFR dimerization and autophosphorylation, initiating the MAPK, Akt, and JNK signaling pathways. EGFR is expressed by epithelial and endothelial cells and is frequently expressed by epithelial carcinomas. |

### Product Details

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| <b>Verified Reactivity</b>    | Human   |
| <b>Antibody Type</b>          | Monoclonal  |
| <b>Host Species</b>           | Mouse   |
| <b>Immunogen</b>              | Recombinant fragment of EGFR, aminoacids 25-138   |
| <b>Formulation</b>            | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)   |
| <b>Preparation</b>            | The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions.  |
| <b>Concentration</b>          | Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our <a href="#">Certificate of Analysis</a> online tool.)   |
| <b>Storage &amp; Handling</b> | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>   |
| <b>Application</b>            | <a href="#">FC – Quality tested</a>   |
| <b>Recommended Usage</b>      | Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is 5 $\mu$ L per million cells in 100 $\mu$ L staining volume or 5 $\mu$ L per 100 $\mu$ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. |
| <b>Excitation Laser</b>       | Red Laser (633 nm)  |
| <b>RRID</b>                   | AB_3675106 (BioLegend Cat. No. 386307)<br>AB_3675106 (BioLegend Cat. No. 386308)  |

### Antigen Details

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| <b>Structure</b>    | Member of the protein kinase superfamily; transmembrane glycoprotein; ligand binding induces dimerization and autophosphorylation |
| <b>Distribution</b> | Epithelial cells and endothelial cells; frequently found in epithelial carcinomas   |
| <b>Function</b>     | Controls cell growth and differentiation  |

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| <b>Ligand/Receptor</b>    | Members of the epidermal growth factor (EGF) family such as EGF, TGF- $\alpha$ , amphiregulin, betacellulin, heparin-binding EGF-like growth factor, GP30 and vaccinia virus growth factor   |
| <b>Cell Type</b>          | Endothelial cells, Epithelial cells  |
| <b>Biology Area</b>       | Cell Biology, Cell Cycle/DNA Replication, Immunology, Innate Immunity, Neuroscience, Synaptic Biology  |
| <b>Molecular Family</b>   | CD Molecules, Growth Factors   |
| <b>Antigen References</b> | <ol style="list-style-type: none"> <li>1. da Cunha Santos G, <i>et al.</i> 2011. <i>Annu Rev Pathol.</i> 6:49-69.</li> <li>2. Gusterson BA and Hunter KD. 2009. <i>Lancet Oncol.</i> 10:522-7.</li> <li>3. Mano M and Humblet Y. 2008. <i>Nat Clin Pract Oncol.</i> 5:415-25.</li> <li>4. Pao W and Chmielecki J. 2010. <i>Nat Rev Cancer.</i> 10:760-74.</li> </ol> |
| <b>Gene ID</b>            | <a href="#">1956</a>   |

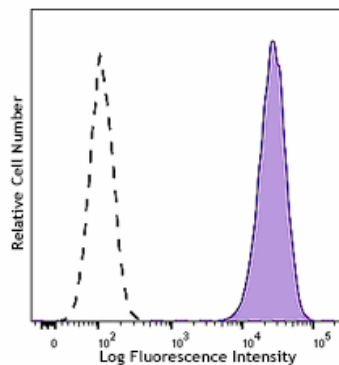
## Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

Purified anti-human EGFR, PE anti-human EGFR, FITC anti-human EGFR, APC anti-human EGFR, Spark UV™ 387 anti-human EGFR Antibody

## Product Data



Human cervical cancer cell line HeLa was stained with anti-human EGFR (clone A21043C) APC (filled histogram) or mouse IgG1,  $\kappa$  APC isotype control (open histogram).

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