

**Alexa Fluor® 488 anti-human EGFR**

**Catalog # / Size:** 2364540 / 100 tests  
2364535 / 25 tests

**Clone:** AY13

**Isotype:** Mouse IgG1,  $\kappa$

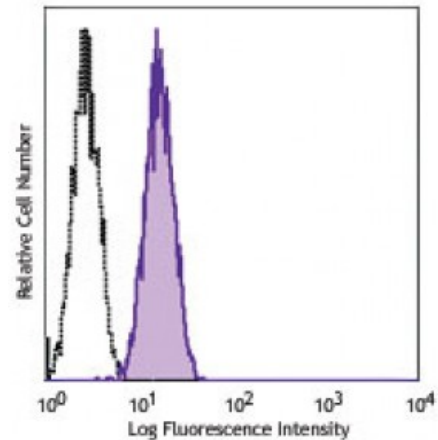
**Immunogen:** Non-small cell lung cancer (NSCLC) cell line NCI-H322

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 488 under optimal conditions.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Concentration:** Lot-specific



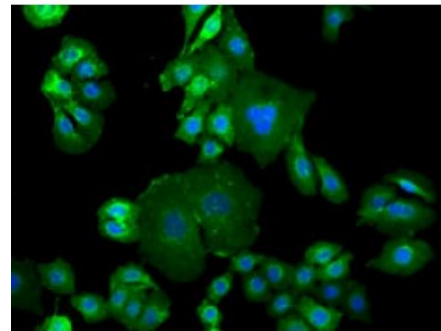
Human cervical cancer cell line HeLa was stained with EGFR (clone AY13) Alexa Fluor® 488 (filled histogram) or mouse IgG1,  $\kappa$  Alexa Fluor® 488 isotype control (open histogram).

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.



HeLa cells were fixed with 1% paraformaldehyde (PFA) and then stained with 10 microg/ml of anti-human EGFR (clone AY13) Alexa Fluor® 488 (green) for 3 hours at room temperature. Nuclei were counterstained with DAPI (blue). The image was captured by

**Application References:** 1. Yamaguchi M, *et al.* 2009. The 15th Annual Meeting Japan Society of Gene Therapy. p1056. Abstract 92.

**Description:** 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,  $\beta$ cellulin, 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.

**Antigen  
References:**

1. da Cunha Santos G, *et al.* 2011. *Annu. Rev. Pathol.* 6:49.
2. Gusterson BA and Hunter KD. 2009. *Lancet Oncol.* 10:522.
3. Mano M and Humblet Y. 2008. *Nat. Clin. Pract. Oncol.* 5:415.
4. Pao W and Chm