

# EGFR Monoclonal Mouse Antibody (GFR/1708)

## Product Description

This MAb recognizes a protein of 170 kDa, identified as EGFR. EGFR is type I receptor tyrosine kinase with sequence homology to erbB-1, -2, -3 -4 or HER-1, -2, -3 -4. It binds to Epidermal Growth Factor (EGF), Transforming Growth Factor- $\alpha$  (TGF- $\alpha$ ), Heparin-binding EGF (HB-EGF), amphiregulin, betacellulin and epiregulin. EGFR is overexpressed in tumors of breast, brain, bladder, lung, gastric, head & neck, esophagus, cervix, vulva, ovary, and endometrium. It is predominantly present in squamous cell carcinomas. Primary antibodies are available purified, or with a selection of fluorescent CF $\text{\textcircled{R}}$  dyes and other labels. CF $\text{\textcircled{R}}$  dyes offer exceptional brightness and photostability. See the [CF \$\text{\textcircled{R}}\$  Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF $\text{\textcircled{R}}$ 405S and CF $\text{\textcircled{R}}$ 405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF $\text{\textcircled{R}}$  dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order. **Catalog number key for antibody number 1708, Anti-EGFR (GFR/1708)**

### Product attributes

|                                       |   |
|---------------------------------------|---|
| Antibody number                       | #1708   |
| Antibody reactivity (target)          | EGFR  |
| Antibody type                         | Primary   |
| Host species                          | Mouse   |
| Clonality                             | Monoclonal  |
| Clone                                 | GFR/1708  |
| Isotype                               | IgG1  |
| Molecular weight                      | ~145 kDa (vIII variant), ~170 kDa (wild type)   |
| Synonyms                              | ErbB1; ERBB1; Errp; HER1; mENA; PIG61; Proto-oncogene c-ErbB-1; Receptor Tyrosine Protein Kinase; ErbB1; Urogastrone; wa2; Wa5  |
| Human gene symbol                     | EGFR  |
| Entrez gene ID                        | 1956  |
| SwissProt                             | P00533  |
| Unigene                               | 488293  |
| Immunogen                             | Recombinant human full-length EGFR protein  |
| Antibody target cellular localization | Plasma membrane   |
| Verified antibody applications        | IHC (FFPE) (verified), WB (verified)  |
| Species reactivity                    | Human   |
| Antibody application notes            | Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 1-2 $\mu\text{g}/\text{mL}$ , Immunohistochemistry (formalin) 1-2 $\mu\text{g}/\text{mL}$ , Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min, Flow Cytometry 0.5-1 $\mu\text{g}/\text{million cells}/0.1 \text{ mL}$ . Optimal dilution for a specific application should be determined by user |
| Positive control                      | A431 cells, Placenta, Breast, Colon or Bladder cancer   |
| Shipping condition                    | Room temperature  |
| Storage Conditions                    | Store at 2 to 8 $^{\circ}\text{C}$ , Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 $^{\circ}\text{C}$  |
| Shelf life                            | Guaranteed for at least 24 months from date of receipt when stored as recommended   |
| Regulatory status                     | For research use only (RUO)   |
| Antibody/conjugate formulation        | Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide   |
| Antibody research areas               | Cancer, Signal transduction   |
| Tumor expression                      | Squamous cell carcinoma   |

| Antibody # prefix | Conjugation                      | Ex/Em (nm) | Laser line | Detection channel                  | Dye Features   |
|-------------------|----------------------------------|------------|------------|------------------------------------|--|
| BNC04             | CF $\text{\textcircled{R}}$ 405S | 404/431    | 405        | DAPI (microscopy), AF405           | <a href="#">CF<math>\text{\textcircled{R}}</math>405S Features</a> |
| BNC88             | CF $\text{\textcircled{R}}$ 488A | 490/515    | 488        | GFP, FITC                          | <a href="#">CF<math>\text{\textcircled{R}}</math>488A Features</a> |
| BNC68             | CF $\text{\textcircled{R}}$ 568  | 562/583    | 532, 561   | RFP, TRITC                         | <a href="#">CF<math>\text{\textcircled{R}}</math>568 Features</a>  |
| BNC94             | CF $\text{\textcircled{R}}$ 594  | 593/614    | 561        | Texas Red $\text{\textcircled{R}}$ | <a href="#">CF<math>\text{\textcircled{R}}</math>594 Features</a>  |
| BNC40             | CF $\text{\textcircled{R}}$ 640R | 642/662    | 633-640    | Cy $\text{\textcircled{R}}$ 5      | <a href="#">CF<math>\text{\textcircled{R}}</math>640R Features</a> |
| BNC47             | CF $\text{\textcircled{R}}$ 647  | 650/665    | 633-640    | Cy $\text{\textcircled{R}}$ 5      | <a href="#">CF<math>\text{\textcircled{R}}</math>647 Features</a>  |
| BNCB              | Biotin                           | N/A        | N/A        | N/A                                |  |
| BNUB              | Purified                         | N/A        | N/A        | N/A                                |  |
| BNUM              | Purified, BSA-free               | N/A        | N/A        | N/A                                |  |

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