

EGFR Monoclonal Mouse Antibody (GFR/1667)

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- α (TGF- α), 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 to inquire about stock status and lead times before placing your order. **Catalog number key for antibody number 1667, Anti-EGFR (GFR/1667)**

Product attributes

Antibody number	#1667
Antibody reactivity (target)	EGFR
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	GFR/1667
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	CF$\text{\textcircled{R}}$405S Features
BNC88	CF $\text{\textcircled{R}}$ 488A	490/515	488	GFP, FITC	CF$\text{\textcircled{R}}$488A Features
BNC68	CF $\text{\textcircled{R}}$ 568	562/583	532, 561	RFP, TRITC	CF$\text{\textcircled{R}}$568 Features
BNC94	CF $\text{\textcircled{R}}$ 594	593/614	561	Texas Red $\text{\textcircled{R}}$	CF$\text{\textcircled{R}}$594 Features
BNC40	CF $\text{\textcircled{R}}$ 640R	642/662	633-640	Cy $\text{\textcircled{R}}$ 5	CF$\text{\textcircled{R}}$640R Features
BNC47	CF $\text{\textcircled{R}}$ 647	650/665	633-640	Cy $\text{\textcircled{R}}$ 5	CF$\text{\textcircled{R}}$647 Features
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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