

## **Mouse Monoclonal Antibody to**

# **EGFR (C-Terminus)**

clone 13G8

0007-100/EGFR-13G8 Order No.:

100 Size (µg) 0007S Lot No.:



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Isotype	Species Reactivity	Applications	Mol. Weight	Ref.Cell Line	Epitope	Immunogen
lgG1	human, mouse	ELISA, WB, IP, ICC, Luminex	180 kDa	HepG2	C-terminus (aa 1165 - 1186), independent of phosphorylation status	peptide conjugated to KLH

#### **Background and Specificity:**

EGFR/erbB receptors are activated upon binding of EGF and EGF-related growth factors such as TGF alpha, beta-cellulin, Hb-EGF, HRG, or NRG. Binding of these ligands leads to receptor homo- and heterodimerization followed by autophosphorylation and activation of downstream signal transduction pathways (MAPK, PI3K/PKB, and STAT). In addition, EGFR becomes fully activated after phosphorylation of Y845 by src family kinases.

Phosphorylation of Y1045 leads to association with cbl and subsequent receptor degradation. Phosphorylation of S1047 by CamKinase II leads to attenuation of kinase activity; phosphorylation of T654 (by PKC) and T669 (by MAPK, p38) interferes with receptor endocytosis/recycling.

Mab EGFR-13G8 specifically recognizes the C-terminus of EGF receptor (aa 1165 - 1186). Recognition is independent of the phosphorylation status at tyrosine 1173.

The antibody was purified from serum-free cell culture **Purification:** 

supernatant by subsequent thiophilic adsorption and size

exclusion chromatography.

lyophilized from 1 ml PBS / 0.09 % Na-azide / PEG and Formulation:

Sucrose.

Reconstitute with 1 ml H<sub>2</sub>O (15 min, RT). Reconstitution:

For long-term storage, freeze lyophilizate upon arrival (-20°C). Stability:

Upon reconstitution, aliquote and freeze in liquid nitrogen; reconstituted antibody can be stored frozen at -80°C up to 1 year. Thaw aliquots at 37°C. Thawed aliquots may be stored at 4°C up to

3 months.

Avoid repeated freeze / thaw cycles.

**Positive Control:** #0811: Cell lysate from untreated HepG2 cells

Immunoblotting: 1 μg/ml for HRPO/ECL detection

> Recommended blocking buffer: Casein/Tween 20 based blocking and blot incubation buffer, e.g. nanoTools product

#3031-500/CPPT or #3031-3000/CPPT.

Immunoprecipitation: use at 1 - 10 µg per 10<sup>6</sup> pervanadate-treated A431 cells

use at 1 - 10 μg/ml **Immunocytochemistry ELISA:** use at 0.05 µg/ml

> All products are supplied for research and investigational use only. Not for use in humans or laboratory animals.

#### **Related Products**

mab to EGFR (cytoplasmic domain)

mab to EGFR (extracellular domain)

mab to EGFR (aa 960 - 980) #0199-100/EGFR-16F8

mab to EGFR (N-terminus)

#0201-100/EGFR-14C

mab to phospho-EGFR (pY 845) #0116-100/EGFR-12A3

mab to phospho-EGFR (pY1045)

mab to phospho-EGFR (pY1068) #0187-100/EGFR-15A

mab to phospho-EGFR (pY 1086)

#0188-100/EGFR-8B8 mab to phospho-EGFR (pY 1148)

mab to phospho-EGFR (pY1173)

mab to dephospho-EGFR (Y1173)

#0009-100/EGFR-20G3

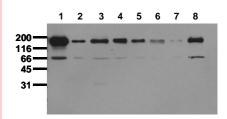
mab to phospho-EGFR (pT669) #0191-100/EGFR-5F10

mab to phospho-EGFR (pT654)

mab to phospho-EGFR (pS1047)

#0107-100/EGFR-1H9

For monoclonal antibodies against erbB2, phospho-erbB2, erbB3 and erbB4, as well as against various EGFR downstream targets, please refer



#### **Detection of endogenous EGFR**

Whole cell lysates of serum starved tumor cells (20.000 cells per lane) were applied to SDS-PAGE and transferred to a PVDF membrane. The immunoblot was probed with mab EGFR-13G8 (0.5  $\mu g/$  ml) for 1h at RT and developed by ECL

lane 1: A431; lane 2: A549; lane 3: SKOV3; lane 4: OVCAR5; lane 5: HaCaT; lane 6: PC3; lane 7: HeLa; lane 8: