

## Product datasheet for AM00047PU-N

### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## EGFR (C-term) (incl. pos. control) Mouse Monoclonal Antibody [Clone ID: 13G8]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: 13G8

Applications: ELISA, IF, IP, WB Recommended Dilution: ELISA (0.05 µg/ml).

**Immunoblotting:** 1 µg/ml for HRPO/ECL detection.

Recommended blocking buffer: Casein/Tween 20 based blocking and blot incubation buffer

AS00002BU-N or AS00002BU-L.

Included Positive Control: Cell lysate from untreated HepG2 cells (See Protocols for more

details).

**Immunoprecipitation** (1-10 µg/ml per 10e6 pervanadate-treated A431 cells).

Immunocytochemistry (1-10 µg/ml).

Reactivity: Human, Mouse

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** Peptide conjugated to KLH.

**Epitope:** C-terminus (aa 1165-1186) independent of phosphorylation status.

**Specificity:** This antibody specifically recognizes the C-terminus of EGF receptor (aa 1165 - 1186).

Recognition is independent of the phosphorylation status at tyrosine 1173.

Formulation: PBS, 0.09% Sodium Azide/PEG and Sucrose

State: Purified

State: Lyophilized purified IgG fraction.

**Reconstitution Method:** Restore with 1 ml H2O (15 min, RT).

**Purification:** Subsequent Ultrafiltration and Size Exclusion Chromatography

Conjugation: Unconjugated





#### EGFR (C-term) (incl. pos. control) Mouse Monoclonal Antibody [Clone ID: 13G8] - AM00047PU-N

Storage: Store lyophilized (preferably in a desiccator) at -20°C and reconstituted (aliquote and

freeze in liquid nitrogen) at -80°C. Avoid repeated freezing and thawing.

Thaw aliquots at 37°C.

Thawed aliquots may be stored at 4°C up to 3 months.

Stability: Shelf life: one year from despatch.

Gene Name: epidermal growth factor receptor

Database Link: Entrez Gene 1956 Human

P00533

**Background:** 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.

Synonyms: Epidermal growth factor receptor, EGF Receptor, erbB-1, c-ErbB-1

Note: Mol. weight: 180 kDa.

Protocol: Positive Control Provided: Cell lysate from untreated HepG2 cells.

**Description:** Cell lysate from untreated HepG2 cells.

Format: Lyophilized cell lysate from serum starved HepG2 cells.

**Reconstitution:** Restore by addition of 200  $\mu$ l H20. After complete solubilization add 200  $\mu$ l 2x SDS-PAGE sample buffer, mix and incubate at 90°C for 5 min.

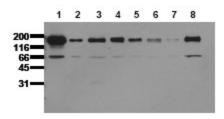
**Storage:** Aliquote and store frozen. Avoid repeated freeze/thaw cycles.

**Application:** The positive control cell lysate is recommended for immunoblot applications. 20  $\mu$ l of positive control cell lysate correspond to ca. 80.000 cells. Use 20  $\mu$ l / lane (mini gel) for HRPO/ECL detection of the target proteins.

**Please note:** The lyophilized cell lysates contain SDS and are not recommended for applications with native proteins such as immunoprecipitation.



# **Product images:**



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 ug/ ml) for 1h at RT and developed by ECL (exp. time: 30 sec). lane 1: A431; lane 2: A549; lane 3: SKOV3; lane 4: OVCAR5; lane 5: HaCaT; lane 6: PC3; lane 7: HeLa; lane 8: HepG2