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

Product datasheet for AM00045PU-N

EGFR (N-term) (incl. pos. control) Mouse Monoclonal Antibody [Clone ID: 14C8]

Product data:

Product Type:	Primary Antibodies
Clone Name:	14C8
Applications:	WB
Recommended Dilution:	**Western blot:** 1 µg/ml for HRPO/ECL detection. ***Recommended blocking buffer:*** Casein/Tween 20 based blocking and blot incubation buffer. ***Included Positive Control:*** Cell lysate from untreated HepG2 cells (See Protocols).
Reactivity:	Canine, Human, Mouse
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Peptide conjugated to hemocyanin
Specificity:	This antibody specifically recognizes the N-terminus of EGF receptor.
Formulation:	PBS containing 0.09% Sodium Azide as preservative, PEG and Sucrose. State: Purified State: Lyophilized purified Ig fraction.
Reconstitution Method:	Restore with 1 ml H2O (15 min, RT).
Purification:	Subsequent Ultrafiltration and Size Exclusion Chromatography
Conjugation:	Unconjugated
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Database Link:	Entrez Gene 1956 Human P00533

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Background: EGF Receptor (EGFR) and erbB2, erbB3, and ErbB4 are members of subclass I of receptor tyrosine kinases.
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 Cell Lysate:** HepG2 untreated

Size Sufficient: 20 mini-gel lanes.

Formulation: Lyophilized cell lysate from serum starved HepG2 cells.

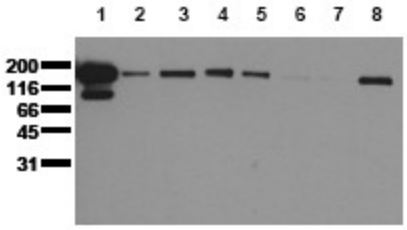
Reconstitution: Restore by addition of 200 µl H2O. After complete solubilization add 200 µl 2x SDS-PAGE sample buffer, mix and incubate at 90°C for 5 min.

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

Application: The positive control cell lysate is recommended for Immunoblot applications.
20 µl of positive control cell lysate correspond to ca. 80.000 cells.
Use 20 µl / 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 EGF stimulated 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-14C8 (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