

AM00034PU-N**Monoclonal Antibody to EGFR / ERBB1 pTyr1069 (incl. pos. control) - Purified**

Alternate names:	EGF Receptor, Epidermal growth factor receptor, Proto-oncogene c-ErbB-1, Receptor tyrosine-protein kinase erbB-1, c-ErbB-1, erbB-1
Quantity:	0.1 mg
Concentration:	0.1 mg/ml
Background:	Protein kinases are enzymes that transfer a phosphate group from a phosphate donor onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. The protein kinase family is one of the largest families of proteins in eukaryotes, classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. Epidermal Growth factor receptor (EGFR) is the prototype member of the type 1 receptor tyrosine kinases. EGFR overexpression in tumors indicates poor prognosis and is observed in tumors of the head and neck, brain, bladder, stomach, breast, lung, endometrium, cervix, vulva, ovary, esophagus, stomach and in squamous cell carcinoma. The phosphorylation status of Tyrosine 1069 regulates the degradation of activated EGFR. Autophosphorylation of Tyrosine 1069 creates a docking site for the c-cbl ubiquitination ligase.
Uniprot ID:	P00533
NCBI:	NP_005219.2
GeneID:	1956
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10P (for use in human samples), AM03095PU-N
Clone:	11C2
Immunogen:	Phosphopeptide conjugated to KLH. Epitope: Phosphotyrosine pY1069 (L Q R pY S S D).
Format:	State: Liquid purified Ig fraction. Purification: Subsequent Thiophilic Adsorption and Size Exclusion Chromatography. Buffer System: PBS, 0.09% Sodium Azide/PEG and Sucrose/50% Glycerol.
Applications:	ELISA: Use at 0.05 µg/ml Immunoblotting: 0.5 µg/ml for HRPO/ECL detection. Recommended blocking buffer: Casein/Tween 20 based blocking and blot incubation buffer. Immunoprecipitation: Use at 1-10 µg per 10e6 pervanadate-treated A431 cells. Positive Control: Cell lysate from pervanadate-treated HepG2 cells (See Protocols for more details).

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

This antibody specifically recognizes EGFR phosphorylated at Tyrosine 1069.

Species: Human and Mouse.

Other species not tested.

Add. Information:

Mol. weight: 180 kDa.

Storage:

Store the antibody (in aliquots) at -20°C.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

Protocols:

Positive Control Provided.

Cell lysate from pervanadate-treated HepG2 cells

Format: Lyophilized cell lysate from HepG2 cells. Serum starved cells were treated for 15 min with pervanadate.

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.

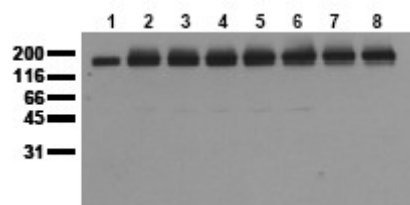
Avoid repeated freeze/thaw cycles.

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.

Pictures:

EGFR Activation Serum starved MDA-MB 468 cells were incubated with 10 ng/ml EGF for the indicated times. Whole cell lysates were prepared with lysis buffer V19 and separated by SDS-PAGE (ca 20.000 cells/lane). The immunoblot was probed with mab EGFR-11C2 (0.5 µg/ ml) for 1 h at RT and developed by ECL (exp. time: 30 sec). Lane 1: Control; Lane 2: 5 min EGF; Lane 3: 15 min EGF; Lane 4: 30 min EGF; Lane 5: 1h EGF; Lane 6: 2h EGF; Lane 7: 4h EGF; Lane 8: 8h EGF.



Recommended Control Peptides:

AM00034CP-N