

Product datasheet for **AM00046BT-N**

EGFR (Extracell. Dom.) (incl. pos. control) Mouse Monoclonal Antibody [Clone ID: 20E12]

Product data:

Product Type:	Primary Antibodies
Clone Name:	20E12
Applications:	WB
Recommended Dilution:	Western Blot: 0.5 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 A431 cells(See Protocols).
Reactivity:	Human
Host:	Mouse
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	Synthetic peptide conjugated to KLH. Epitope: Extracellular domain.
Specificity:	This antibody specifically recognizes the extracellular domain of EGF receptor.
Formulation:	PBS with 0.09% Sodium Azide, PEG and Sucrose Label: Biotin State: Liquid purified IgG fraction from from serum-free cell culture supernatant
Concentration:	lot specific
Purification:	Size Exclusion Chromatography
Conjugation:	Biotin
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	180 kDa
Gene Name:	epidermal growth factor receptor
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:** Protocol: **Included Positive Control: Cell Lysate from untreated A431 cells.**
- Formulation:** Lyophilized cell lysate from serum starved A431 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.