

## Product datasheet for **AM00033PU-N**

### EGFR (960-980) (incl. pos. control) Mouse Monoclonal Antibody [Clone ID: 16F8]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	16F8
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).
Reactivity:	Canine, Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Peptide conjugated to hemocyanin, cytoplasmic domain (aa 960 - 980)
Specificity:	This antibody specifically recognizes the cytoplasmic domain of EGF receptor (aa 960 - 980). Recognition is independent of the phosphorylation status.
Formulation:	PBS, 0.09 % Na-azide, PEG and Sucrose. State: Purified State: Lyophilized Ig fraction Label: Subsequent ultrafiltration and size exclusion chromatography
Reconstitution Method:	Restore with 1 ml H <sub>2</sub> O (15 min, RT).
Conjugation:	Unconjugated
Storage:	Store lyophilised product upon arrival at -20 °C. Following reconstitution aliquot and store at 2 - 8 °C for up to three months or freeze in liquid nitrogen at -80 °C for longer. Avoid repeated freezing and thawing. Should this product contain a precipitate, we recommend centrifugation before use.
Stability:	Shelf life: One year from despatch.
Gene Name:	epidermal growth factor receptor
Database Link:	<a href="#">Entrez Gene 1956 Human P00533</a>



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**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.

Positive control included: **Cell lysate from untreated HepG2 cells** (see "Protocol").

Protocol: **Positive Control Cell Lysate: HepG2 untreated**

**Formulation:** Lyophilized cell lysate from serum starved HepG2 cells.

**Reconstitution:** Restore by adding 200  $\mu$ l H<sub>2</sub>O. After complete solubilization add 200  $\mu$ l 2x SDS-PAGE sample-buffer, mix and incubate at 90°C for 5 min.

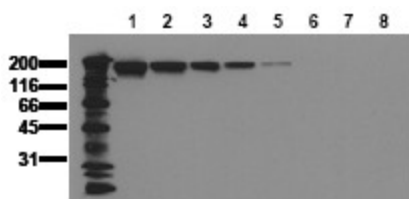
**Aliquote and store frozen. Avoid repeated freezing and thawing**

**Application:** The positive cell lysate is recommended for immunoblot applications. 20  $\mu$ l of positive 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:**

Antibody sensitivity Whole cell lysates of vanadate - treated HepG2 containing defined cell numbers per lane were applied to SDS-PAGE and transferred to PVDF membranes. Immunoblots were probed with mab EGFR-16F8 (0.5  $\mu$ g/ml) for 1h at RT and developed by ECL (exp. time: 30 sec). lane 1: 160.000 cells, lane 2: 80.000 cells, lane 3: 40.000 cells, lane 4: 20.000 cells, lane 5: 10.000 cells, lane 6: 5.000 cells, lane 7: 2.500 cells, lane 8: 1.000 cells