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orders & support:

Mouse Monoclonal Antibody to

EGFR (cytoplasmic domain)

clone 16F8

biotinylated

0199-100BIOTIN/EGFR-16F8 Order No.:

100 Size (µg) 0199S Lot No.:

02/260207F

| Isotype | Species Reactivity | Applications | Mol. Weight | Ref.Cell Line | Epitope | Immunogen |
|---------|---------------------------|--------------|-------------|---------------|--------------------------------------|----------------------------------|
| IgG1 | Human, Mouse, Rat, Dog | WB | 180 kDa | HepG2 | cytoplasmic domain (aa 960 - 980) | peptide conjugated to hemocyanin |

Background and Specificity:

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.

Mab EGFR-16F8 specifically recognizes the cytoplasmic domain of EGF receptor (aa 960 -980). Recognition is independent of the phosphorylation status.

The antibody was purified from serum-free cell culture **Purification:**

supernatant by subsequent ultrafiltration and size exclusion

chromatography.

Formulation: liquid; 0.5 mg/ml in PBS/0.09% Na-Azide/PEG and Sucrose

Reconstitution:

Stability: Aliquote and freeze in liquid nitrogen; antibody can be stored

frozen at -80°C up to 1 year. Thaw aliquots at 37°C. Thawed

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

Avoid repeated freeze / thaw cycles.

#0811: Cell lysate from untreated HepG2 cells **Positive Control:**

Immunoblotting: 0.5 µg/ml for HRPO/ECL detection

> Recommended blocking buffer: Casein/Tween 20 based blocking and blot incubation buffer, e.g. nanoTools product

#3031-500/CPPT or #3031-3000/CPPT.

Immunoprecipitation: ND ND **Immunocytochemistry** ND **ELISA:**

> All products are supplied for research and investigational use only. Not for use in humans or laboratory animals.

Related Products

mab to EGFR (C-terminus)

mab to EGFR (cytoplasmic domain)

mab to EGFR (extracellular domain)

#0209-100/FGFR-20F12

mab to EGFR (N-terminus)

#0201-100/EGFR-14C mab to phospho-EGFR (pY 845) #0116-100/EGFR-12A3

mab to phospho-EGFR (pY1045)

mab to phospho-EGFR (pY1068)

#0187-100/EGFR-15A2

mab to phospho-EGFR (pY 1086) #0188-100/EGFR-8B8

mab to phospho-EGFR (pY 1148)

mab to phospho-EGFR (pY1173)

mab to dephospho-EGFR (Y1173)

#0009-100/EGFR-20G3 mab to phospho-EGFR (pT669)

#0191-100/EGFR-5F10

mab to phospho-EGFR (pT654)

mab to phospho-EGFR (pS1047)

#0107-100/EGFR-1H9

For monoclonal antibodies against erbB2, phospho-erbB2, erbB3 and erbB4, as well as against various EGFR downstream targets, please refer

to our website at www.nanotools.de