Mouse Monoclonal Antibody to

EGFR (phospho-Tyr 1173)

clone 9H2

Order No.: **0008-100/EGFR-9H2**

Size (µg) 100

Lot No.: 0008S

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02/260207F

Isotype	Species Reactivity	Applications	Mol. Weight	Ref.Cell Line	Epitope	Immunogen
IgG1	human, mouse, dog	WB, IP, ICC, IHC (PS, FS), ELISA, Luminex	180 kDa	HepG2	phospho-Y1173 N A E pY L R V	Phosphopeptide conjugated to KLH

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-9H2 specifically interacts with the **1170 - N A E pY L R V** motif corresponding to the major autophosphorylation site of human EGFR. Mab 9H2 does not crossreact with the highly homologous pTyr1248 of acticated erbB2.

Purification: The antibody was purified from serum-free cell culture supernatant by subsequent thiophilic adsorption and size exclusion chromatography.

Formulation: lyophilized from 1 ml PBS / 0.09 % Na-azide / PEG and Sucrose.

Reconstitution: Reconstitute with 1 ml H_2O (15 min, RT).

Stability: For long-term storage, freeze lyophilizate upon arrival (-20°C). Upon reconstitution, aliquote and freeze in liquid nitrogen; reconstituted 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.

Positive Control: #0812: Cell lysate from vanadate-treated HepG2 cells

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: use at 1 - 10 µg per 10^6 vanadate treated A431 cells

Immunocytochemistry use at 1 - 10 µg/ml

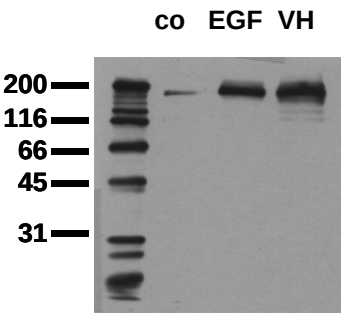
ELISA: use at 0.05 µg/ml

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

Related Products

Blocking peptide for mab EGFR-9H2
#2006-100/EGFR pTyr1173
mab to EGFR (C-terminus)
#0007-100/EGFR-13G8
mab to EGFR (cytoplasmic domain)
#0168-100/EGFR-10F4
mab to EGFR (extracellular domain)
#0209-100/EGFR-20E12
mab to EGFR (aa 960 - 980)
#0199-100/EGFR-16F8
mab to EGFR (N-terminus)
#0201-100/EGFR-14C8
mab to phospho-EGFR (pY 845)
#0116-100/EGFR-12A3
mab to phospho-EGFR (pY1045)
#0136-100/EGFR-11C2
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)
#0219-100/EGFR-10G12
mab to dephospho-EGFR (Y1173)
#0009-100/EGFR-20G3
mab to phospho-EGFR (pT669)
#0191-100/EGFR-5F10
mab to phospho-EGFR (pT654)
#0138-100/EGFR-3F2
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



Phosphospecificity

Whole cell extracts of control (co), EGF stimulated (EGF) or pervanadate treated (VH) A549 tumor cells were applied to SDS-PAGE (ca 20.000 cells per lane) and transferred to a PVDF membrane. The immunoblot was probed with mab EGFR-9H2 (0.5 µg/ ml) for 1h at RT and developed by ECL (exp. time: 30 sec).