

Mouse Monoclonal Antibody to

EGFR (phospho-Thr 654)

clone 3F2

Order No.: 0138-100/EGFR-3F2

Size (µg) 100

Lot No.: 0138S

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03/260207F

Isotype	Species Reactivity	Applications	Mol. Weight	Ref. Cell Line	Epitope	Immunogen
IgG1	human, mouse, rat, dog	ELISA, WB, IP, Luminex	180 kDa	HepG2	Phosphothreonine 654 R K R p T L R R	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-3F2 specifically recognizes EGFR phosphorylated at Threonine 654. The antibody is suitable for Western Blot and ELISA applications.

Related Products

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 phospho-EGFR (pY1173)

#0008-100/EGFR-9H2

mab to dephospho-EGFR (Y1173)

#0009-100/EGFR-20G3

mab to phospho-EGFR (pT669)

#0191-100/EGFR-5F10

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

Purification:	The antibody was purified from serum-free cell culture supernatant by subsequent thiophilic adsorption and size exclusion chromatography.
Formulation:	liquid; 0.1mg/ml in PBS/0.09% Na-Azide/PEG and Sucrose/50% Glycerol
Reconstitution:	
Stability:	Aliquote and store at -20°C for up to 1 year.

Avoid repeated freeze / thaw cycles.

Positive Control: #0817: Cell lysate from PMA-/pervanadate-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 10⁶ vanadate treated A431 cells

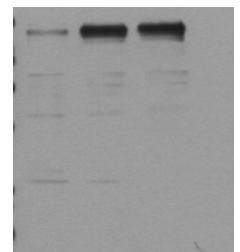
Immunocytochemistry ND

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.

co PMA VH

200 —
116 —
66 —
45 —
31 —



Phosphospecificity

Whole cell extracts of control (co), stimulated (PMA) or pervanadate treated (VH) OVCAR-5 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-3F2 (0.5 µg/ml) for 1h at RT and developed by ECL (exp. time: 30 sec).