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Mouse Monoclonal Antibody to

Insulin Receptor (activation loop)

clone 9H4

0142-100/InsR-9H4 Order No.:

100 Size (µg) 0142S Lot No.:



03/080507F

Mol. Weight Isotype **Species Reactivity Applications** Ref.Cell Line **Epitope Immunogen** T47D IgG1 human, mouse, rat, WB. ELISA, 97 kDa kinase activation loop peptide conjugated to **IHC** hemocyanin dog

Background and Specificity:

The insulin receptor (InsR) is a heterodimeric receptor tyrosine kinase with an extracellular alpha-chain, a transmembrane domain and an intracellular beta-chain. The insulin receptor is activated upon binding of the peptide hormone insulin, leading to autophosphorylation of tyrosine residues 1146, 1150, and 1151 in the activation loop of the beta-chain. Additional phosphorylation sites such as tyrosine residues 960, 1316, and 1322 regulate the assembly of signal transduction complexes.

Mab InsR-9H4 specifically recognizes the activation loop of Insulin receptor (phosphorylation-independent).

Related Products

mab to IGF1R (phospho-Tyr 1316)

#0128-100/IGF1R-2B9

mab to IGF1R (C-terminus) #0198-100/IGF1R-7G11

mab to InsR (phospho-Tyr 1150/1151)

#0143-100/InsR-10C3

mab to InsR (phospho-Tyr 1322)

#0127-100/InsR-21G12

mab to InsR (C-terminus) #0160-100/InsR-11B6

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

supernatant by subsequent thiophilic adsorption and size

exclusion chromatography.

lyophilized from 1 ml 2 x PBS / 0.09 % Na-azide / PEG and Formulation:

Sucrose.

Reconstitute with 1 ml H₂O (15 min, RT). Reconstitution:

For long-term storage, freeze lyophilizate upon arrival (-20°C). Stability:

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: #1011: Cell lysate from untreated T47D cells

Immunoblotting: 1 µg/ml for HRPO/ECL detection

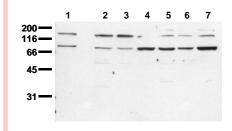
Recommended blocking buffer: Casein/Tween 20 based blocking and blot incubation buffer, e.g. nanoTools product

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

Immunoprecipitation: ND ND Immunocytochemistry:

use at 0.1 µg/ml **ELISA:**

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



Detection of endogenous InsR

Whole cell extracts of serum starved tumor cells (20.000 cells per lane) were applied to SDS-PAGE and transferred to a PVDF membrane. The immunoblot was probed with mab InsR-9H4 (0.5 $\mu g/$ ml) for 1h at RT and developed by ECL (exp. time: 3

lane 1: A431: lane 2: SW480: lane 3: SW620: lane 4: HT29: lane 5: MCF-7; lane 6: MDA-MB231; lane 7: T47D