

Mouse Monoclonal Antibody to

**Insulin Receptor (activation loop)**

**clone 9H4**

**Order No.:** 0142-100/InsR-9H4  
**Size (µg)** 100  
**Lot No.:** 0142S



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03/080507F

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

**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

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

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

**Reconstitution:** Reconstitute with 1 ml H<sub>2</sub>O (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.**

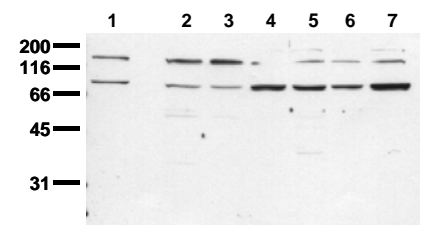
**Positive Control:** #1011: Cell lysate from untreated T47D cells

**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

**Immunocytochemistry:** ND

**ELISA:** use at 0.1 µg/ml



**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 µg/ml) for 1h at RT and developed by ECL (exp. time: 3 min).  
 lane 1: A431; lane 2: SW480; lane 3: SW620; lane 4: HT29; lane 5: MCF-7; lane 6: MDA-MB231; lane 7: T47D

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