DATA SHEET

Insulin Receptor (α-Subunit) Ab-2 (Clone 83-7)

Mouse Monoclonal Antibody

Cat. #DLN-10219, DLN-10220, or DLN-10218 (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Purified Ab with BSA and Azide)
Cat. #DLN-10221 or DLN-10222 (0.1ml or 0.2ml at 1.0mg/ml) (Purified Ab without BSA and Azide)
Cat. #DLN-10216, DLN-10217, or DLN-10215 (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Biotin-Labeled Ab with BSA and Azide)
Cat. #DLN-10223 (7.0ml) (Ready-to-Use for Immunohistochemical Staining)

Description: The human insulin receptor is a heterotetrameric membrane glycoprotein consisting of disulfide-linked subunits in a β-α-α-β configuration. The β-subunit (95kDa) possesses a single transmembrane domain, whereas the α-subunit (135kDa) is completely extracellular.

Mol. Wt. of Antigen: 135kDa

Epitope: Exon 3

Species Reactivity: Human, Cow[1], Pig[1], Sheep[1], and Rabbit.[1] Does not react with mouse and rat.[1]

Clone Designation: 83-7

Ig Isotype / Light Chain: IgG_1 / κ

Immunogen: IM-9 lymphocytes followed by IR.[1]

Applications and Suggested Dilutions:

- Insulin-like Agonist[2] (Order Ab without azide)
- ELISA (Both as capture and reporter)
  (Order Ab without BSA)
- Flow Cytometry[7]
- Does Not Significantly Inhibit Insulin Binding[1]
- Tyrosine Kinase Assay
  (Ab-mediated capture on microtitre plates)
- Immunohistology (Formalin/paraffin)
  (Use Ab 2-4µg/ml for 30 min at RT)

* (Staining of formalin/paraffin tissues REQUIRES digestion of tissue sections with pepsin at 1mg/ml Tris-HCl, pH 2.0 for 15 min at RT or 10 min at 37C)

The optimal dilution for a specific application should be determined by the investigator.

Positive Control: IM-9 lymphocyte cells.[1] Placenta[1].

Cellular Localization: Cell membrane

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Supplied As: 200µg/ml of antibody purified from ascites fluid by Protein G chromatography. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide at 1mg/ml, or Prediluted antibody which is ready-to-use for staining of formalin-fixed, paraffin-embedded tissues.

Storage and Stability: Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

Key References:

1. Soos MA, *et. al.* Biochem J, 1986, 235(1):199-208.
2. Taylor R, *et. al.* Biochem J, 1987, 242(1):123-9.
3. Soos MA, *et. al.* Proc Natl Acad Sci USA, 1989, 86(14):5217-21.
4. Soos MA, *et. al.* Biochem J, 1989, 263(2):553-63.
5. Prigent SA, *et. al.* J Bio Chem, 1990, 265:9970-7.
6. Zhang B, *et. al.* Proc Natl Acad Sci USA, 1991, 88:9858-62.
7. Macaulay SL, *et. al.* Biochem J, 1995, 306:811-20.

Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. Dianova is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

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