IR/IGF1R [pY1162/pY1163] ABfinity™ Recombinant Rabbit Monoclonal Antibody - Purified

REF Catalog no. 700393

(See product label for lot information)

Clone/PAD: 97H9L7
Isotype: IgG
Gene ID: 3480, 3643
Protein Acc. no.: P06213, P08069
Qty: 100 µg
Volume: 200 µl
Concentration: 0.5 mg/ml

Formulation
PBS + 0.09% azide

Immunogen
A peptide corresponding to amino acids 1186-1197 and 1162-1173 of P06213 and P08069, respectively

Immunogen sequence
ETD[pY][pY]RKGGKGL

Reactivity
This antibody reacts with human IR/IGF1R [pY1162/pY1163]. Based on sequence identity and similarity, reactivity to mouse, rat, chimanzee, Rhesus monkey, swine, equine, bovine, Xenopus, canine, and chicken is expected.

Specificity
This antibody is specific for IR/IGF1R [pY1162/pY1163] and does not recognize non-phosphorylated IR/IGF1R.

Storage
2-8°C for up to 1 mo, -20°C for long term storage. Avoid repeated freezing and thawing.

Expiration Date
Expires one year from date of receipt when stored as instructed.

Validated Applications:

	Species	Test Material	Concentration
Western Blotting	human	CHO-cells stably transfected with human IR + insulin	1-2 µg/ml
Sandwich ELISA	Detector		1-5 µg/ml

Background
Biological actions of insulin and IGF-1 are mediated by their respective cell surface receptor tyrosine kinases that regulate multiple signaling pathways through activation of a series of phosphorylation cascades. The insulin receptor (IR) and insulin-like growth factor 1 receptor (IGF-1R) are heterotetrameric proteins consisting of two ligand-binding alpha subunits and two beta subunits that each contain a tyrosine kinase domain (1,2). Insulin/IGF-1 binding to the extracellular domain leads to autophosphorylation of downstream target proteins. These two receptors differ in sequence in regions that confer specificity for the designated ligand as well as in certain intracellular signaling domains, resulting in significant differences in the functional consequences of activation of each receptor. Defects in IR are the cause of various insulin resistance syndromes and IGF-1R defects may cause some forms of growth retardation. Both these signaling cascades are also important for the development of cancer (1,2).

References

1. Belfiore, A and Frasca, F (2008) IGF and insulin receptor signaling in breast cancer. J Mammary Gland Biol Neoplasia 13:381-406.
2. Riedemann, J and Macaulay, VM. (2006) IGF1R signalling and its inhibition.Endocr Relat Cancer 12 Suppl 1:S33-43.

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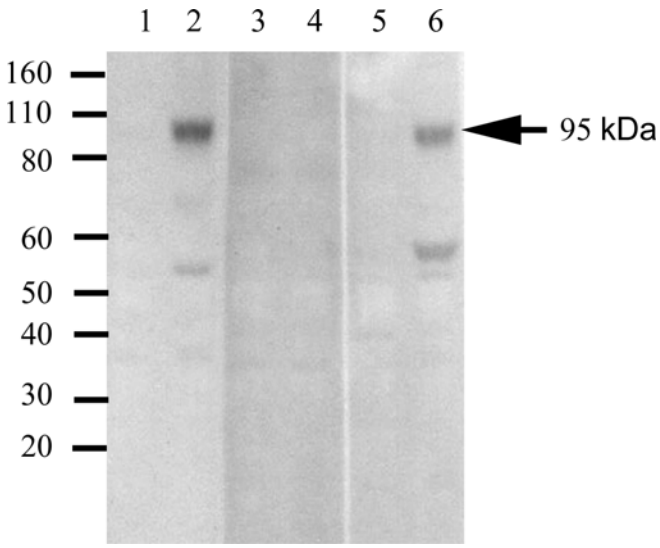

Western blot of CHO cells transfected with IR labeled rabbit anti-IR/IGF1R [pY1162/pY1163] (Cat. No. 700393).

Rabbit anti-IR/IGF1R [pY1162/pY1163] (1 µg/ml) was used to label IR/IGF1R [pY1162/pY1163] in CHO cells transfected with IR stimulated with (lanes 2,4,6) or without (lanes 1,3,5) insulin. Pre-incubation with the phosphopeptide used for immunization resulted in loss of signal (lanes 3,4) whereas no pre-incubation (lanes 1,2) or pre-incubation with non-phosphopeptide (lanes 5,6) did not.

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