

IR [pY1158] ABfinity™ Recombinant Rabbit Monoclonal Antibody – Purified

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Catalog Number: 701070

Store at 2–8°C

Clonality: Monoclonal
Concentration: 0.5 mg/mL
Quantity: 100 µg
Volume: 200 µL

Host/Class: Rabbit IgG
Reactivity: Human insulin receptor
Predicted Reactivity: Human

Product Description

Insulin receptor (IR), belongs to the growth factor receptor tyrosine kinase superfamily which regulates multiple signaling pathways. It is a heterotetrameric membrane glycoprotein consisting of α and the β subunits encoded by the INSR gene in humans. IR and IGF-1 receptors share major structural and functional similarity, and mediates growth and differentiation. The catalytic loops within the tyrosine kinase domains of the IR/IGF-1R share the same residue sequence with a three-tyrosine motif corresponding to Tyr¹¹⁵⁸, Tyr¹¹⁶², and Tyr¹¹⁶³ (for IR), and Tyr¹¹³¹, Tyr¹¹³⁵, and Tyr¹¹³⁶ (for IGF-1R). It is generally believed that autophosphorylation within the activation loop proceeds in a progressive manner, initiating at the second tyrosine (1162 or 1135), followed by phosphorylation at the first tyrosine (1158 or 1131), and then at the final position (1163 or 1136), upon which IR or IGF-1R becomes fully active. In humans, the IR gene is located on chromosome 19.

Product Specifications

Immunogen: Phosphopeptide corresponding to amino acids 1153–1162 of human insulin receptor
Alternate Names: IR, CD220
Apparent MW: ~115 kDa
Gene ID: 3643
Protein Accession No.: P06213
Sequence Identity: Human
Sequence Homology: Monkey, Rat and Mouse
Clone/PAD: 8H20L22
Lot: See product label

Product Applications

Application	Species	Test Material	Concentration
Western blotting	Human	HeLa cells	1–3 µg/mL
Indirect ELISA	Human	Phosphopeptide	1.5 × 10 ⁻⁴ to 3 µg/mL

Storage and Handling

Store the antibody at 2–8°C for up to 1 month, or –20°C for long storage. Avoid repeated freezing and thawing.

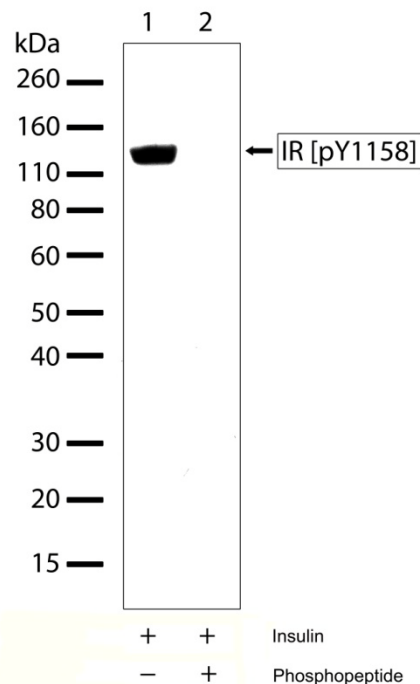


Figure 1 Western blot analysis of IR [pY1158] ABfinity™ Recombinant Rabbit Monoclonal Antibody (Cat. no. 701070). Western blot analysis was performed on whole cell extracts of serum starved HeLa cells treated with insulin (100 ng/mL for 15 minutes, lanes 1 and 2). A band corresponding to phosphorylated IR at ~115 kDa was detected using IR [pY1158] ABfinity™ Recombinant Rabbit Monoclonal Antibody at a concentration of 1 µg/mL (lane 1). To confirm specificity, competition was performed with the phosphopeptide (lane 2).

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Manufacturing Site • 7335 Executive Way • Frederick • MD 21704 • E-mail: techsupport@invitrogen.com

Stability

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

Storage Buffer

Phosphate buffered saline (PBS) with 0.09% sodium azide.

Safety Data Sheets (SDS)

Safety Data Sheets (SDSs) are available at www.invitrogen.com/sds.

Certificate of Analysis

The Certificate of Analysis provides detailed quality control and product qualification information for each product. Certificates of Analysis are available on our website. Go to www.invitrogen.com/support and search for the Certificate of Analysis by product lot number, which is printed on the box.

Related Products

Product Name	Quantity	Catalog No.
iBlot [®] Dry Blotting System	1 unit	IB1001
WesternBreeze [™] Chromogenic Kit Anti-Rabbit	1 kit	WB7105
WesternBreeze [™] Chemiluminescent Kit, Anti-Rabbit	1 kit	WB7106
Goat anti-mouse (H+L), HRP conj.	1 mg	G21040
Goat anti-rabbit (H+L), HRP conj.	1 mg	G21234
Goat anti-mouse (H+L), AP conj.	1 mg	G21060
Goat anti-rabbit (H+L), AP conj.	1 mg	G21079
Nitrocellulose, 0.2 µm	20/pack	LC2000

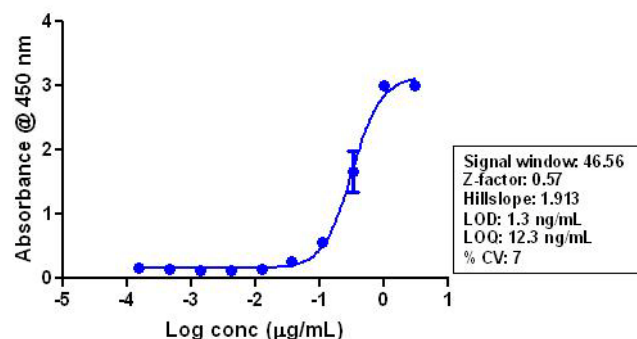


Figure 2 Indirect ELISA of IR [pY1158] ABfinity[™] Recombinant Rabbit Monoclonal Antibody (Cat. no. 701070). Indirect ELISA was performed using various dilutions of IR [pY1158] ABfinity[™] Recombinant Rabbit Monoclonal Antibody (Cat. no. 701070) to detect phospho IR [pY1158] peptide coated onto the plate. A non-linear regression analysis was performed (4 PL) and LOD and LOQ for the antibody was determined.

Explanation of symbols

Symbol	Description	Symbol	Description
	Catalogue Number		Batch code
	Research Use Only		In vitro diagnostic medical device
	Use by		Temperature limitation
	Manufacturer		European Community authorised representative
	Without, does not contain		With, contains
	Protect from light		Consult accompanying documents
	Directs the user to consult instructions for use (IFU), accompanying the product.		

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