

Phospho-IR/IGF1R (Tyr1158) Polyclonal Antibody

Product Details	
Size	100 µL
Species Reactivity	Human
Published Species	Hamster, Human, Mouse
Host/Isotope	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Synthetic phosphopeptide derived from the region of IR/IGF1R that contains tyrosine 1158 of the human insulin receptor (IR) (tyrosine 1131 for IGF1R)
Form	Liquid
Purification	Antigen affinity chromatography
Storage buffer	Dulbecco's PBS, pH 7.3, with 1mg/mL BSA, 50% glycerol
Contains	0.05% sodium azide
Storage Conditions	-20°C
RRID	AB_2533761

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC)	1:100-1:500	-
Immunofluorescence (IF)	1:100-1:500	-
Immunohistochemistry (IHC)	Assay Dependent	-
Western Blot (WB)	1:1000	5 Publications
Immunoprecipitation (IP)	-	2 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

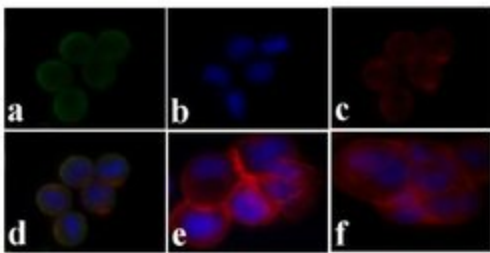
Product Specific Information

The antibody has been negatively preadsorbed using a non-phosphopeptide corresponding to the site of phosphorylation to remove antibody that is reactive with non-phosphorylated insulin/insulin-like growth factor-1 receptor (IR/IGF1R). The final product is generated by affinity chromatography using an IR/IGF1R-derived peptide that is phosphorylated at tyrosine 1158 (tyrosine 1131 for IGF1R).

CHO-T transfected with a vector containing insulin receptor and stimulated with insulin was used as positive control.

The immunogenic sequence is conserved in mouse and rat for both the IR and IGF1R; this antibody is expected to react in human, mouse, and rat, and has been used in western blotting and immunostaining.

Advanced Verification Data



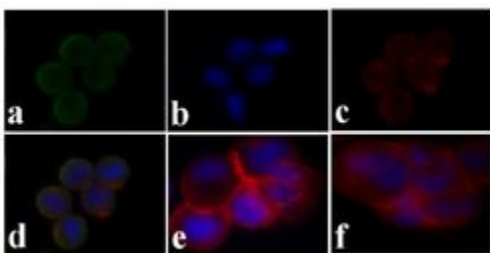
Phospho-IR/IGF1R (Tyr1158) Antibody (44-802G)

Modulation of target protein phosphorylation by cell treatment demonstrates antibody specificity. Immunofluorescence analysis of IR/IGF1R pY1158 using IR/IGF1R (pY1158) polyclonal antibody (Product # 44-802G) shows induced expression of IR/IGF1R (pY1158) in the membrane of MCF7 cells treated with insulin. Cell treatment validation info.

Product Images For Phospho-IR/IGF1R (Tyr1158) Polyclonal Antibody

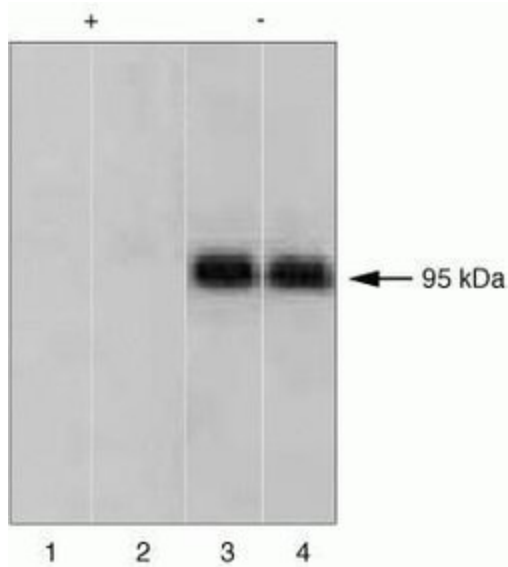
Phospho-IR/IGF1R (Tyr1158) Antibody (44-802G) in IF

Immunofluorescence analysis of IR/IGF1R (pY1158) was done on 70% confluent log phase MCF7 cells treated with insulin (100nM for 5 min). The cells were fixed with 4% paraformaldehyde for 15 minutes, permeabilized with 0.25% Triton™ X-100 for 10 minutes, and blocked with 5% BSA for 1 hour at room temperature. The cells were labeled with IR/IGF1R (pY1158) Rabbit polyclonal Antibody (Product # 44-802G) at 2 µg/mL in 1% BSA and incubated for 3 hours at room temperature and then labeled with Alexa Fluor 488 Goat Anti-Rabbit IgG Secondary Antibody (Product # A-11008) at a dilution of 1:400 for 30 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant DAPI (Product # S36938). F-actin (Panel c: red) was stained with Alexa Fluor 594 Phalloidin (Product # A12381). Panel d is a merged image showing membrane localization. Panel e shows untreated MCF7 cells. Panel f shows no primary antibody control. The images were captured at 20X magnification.



Phospho-IR/IGF1R (Tyr1158) Antibody (44-802G) in WB

IR/IGF1R (pY1158) and IR/IGF1R (pYpY1162/63) phosphospecific antibodies. CHO-T cell extracts transfected with an IR vector either unstimulated (-) or stimulated (+) with insulin (Product # 55150A) were immunoblotted with phosphospecific antibodies to IR/IGF1R. IR/IGF1R (pY1158) (1, 3). IR/IGF1R (pYpY1162/1163) (2, 4).



Western Blot (5)

Diabetes

Novel Monoclonal Antibody Is an Allosteric Insulin Receptor Antagonist That Induces Insulin Resistance.

"44802G was used in western blot to generate and characterize an antibody that is specific for the insulin receptor and evaluate its effect on diabetic pathogenesis"

Authors: Cieniewicz AM, Kirchner T, Hinke SA, Nanjunda R, D'Aquino K, Boayke K, Cooper PR, Perkinson R, Chiu ML, Jarantow S, Johnson DL, Whaley JM, Lacy ER, Lingham RB, Liang Y, Kihm AJ

Species
Human

Dilution
Not Cited

Year
2017

Aging cell

Methionine restriction restores a younger metabolic phenotype in adult mice with alterations in fibroblast growth factor 21.

"44-802G was used in western blot to examine the ability of methionine restriction to reverse age-induced obesity and insulin resistance in adult mice"

Authors: Lees EK, Król E, Grant L, Shearer K, Wyse C, Moncur E, Bykowska AS, Mody N, Gettys TW, Delibegovic M

Species
Not Applicable

Dilution
Not Cited

Year
2014

[View more WB references on thermofisher.com](#)

Miscellaneous PubMed (1)

Cellular signalling

Novel method demonstrates differential ligand activation and phosphatase-mediated deactivation of insulin receptor tyrosine-specific phosphorylation.

"44-802G was used to research a novel method of differential ligand activation and phosphatase-mediated deactivation of insulin receptor tyrosine-specific phosphorylation"

Authors: Cieniewicz AM, Cooper PR, McGehee J, Lingham RB, Kihm AJ

Species
Not Applicable

Dilution
Not Cited

Year
2016

Immunoprecipitation (2)

Endocrinology

The adapter protein GRB10 is an endogenous negative regulator of insulin-like growth factor signaling.

Authors: Dufresne AM, Smith RJ

Species
Mouse

Dilution
Not Cited

Year
2005

More applications with references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.