

Datasheet: AHP1216

Description:	RABBIT ANTI HUMAN CD220
Specificity:	CD220
Other names:	INSULIN RECEPTOR
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	50 µg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			■	
Immunohistology - Frozen			■	
Immunohistology - Paraffin (1)	■			5 - 15ug/ml
ELISA			■	
Immunoprecipitation			■	
Western Blotting			■	
Functional Assays			■	

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.

Target Species	Human
Product Form	Purified IgG - liquid
Antiserum Preparation	Antisera to CD220 were raised by repeated immunisations of rabbit with highly purified antigen. Purified IgG prepared by affinity chromatography.
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 0.1mg/ml
Immunogen	Synthetic peptide corresponding to human CD220 - conjugated to KLH.

**External Database
Links**

UniProt:

[P06213](#)

[Related reagents](#)

Entrez Gene:

[3643](#)

INSR

[Related reagents](#)

Specificity

Rabbit anti Human CD220 antibody detects an epitope within in the internal domain of human CD220, also known as Insulin receptor (INRS). CD220 is a heterotetrameric membrane glycoprotein consisting of four disulfide linked subunits; two alpha subunits and two beta subunits. CD220 is a member of the tyrosine kinase family of receptors, and mediates the effects of insulin and IGF-I (insulin-like growth factor-I) through the activation of insulin receptor substrate (IRS) proteins and downstream effector cascades.

Activation of CD220 leads to a number of cellular effects, including glucose uptake, the regulation of cell proliferation and gene expression. These effects mostly occur in skeletal muscle, fat and the liver. Neuronal CD220 signalling has been shown to have an important role in energy homeostasis, reproduction and the development of neurodegenerative diseases.

**Histology Positive
Control Tissue**

Pancreas, Islet of Langerhans

References

1. Youngren, J.F. (2007) Regulation of insulin receptor function. [Cell Mol Life Sci. 64 \(7-8\): 873-91.](#)
2. Wada, A. *et al.* (2005) New twist on neuronal insulin receptor signaling in health, disease, and therapeutics. [J Pharmacol Sci. 99 \(2\): 128-43.](#)
3. Toth, B. *et al.* (2009) Insulin and leptin receptors as possible new candidates for endocrine control in normal and disturbed human pregnancy. [Mol Hum Reprod. 15 \(4\): 231-9.](#)

Further Reading

1. Plum, L. *et al.* (2005) The role of insulin receptor signaling in the brain. [Trends Endocrinol Metab. 16 \(2\): 59-65.](#)

Storage

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

**Health And Safety
Information**

Material Safety Datasheet documentation #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

Sheep Anti Rabbit IgG (2AB02...) [Biotin](#)
Sheep Anti Rabbit IgG (STAR36...) [DyLight®488](#), [DyLight®549](#), [DyLight®649](#),
[DyLight®680](#), [DyLight®800](#)

Recommended Useful Reagents

[HISTAR DETECTION SYSTEM \(STAR3000A\)](#)
[HISTAR DETECTION SYSTEM \(STAR3000B\)](#)
[HISTAR DETECTION SYSTEM \(STAR3000C\)](#)
[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)
[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025C\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
----------------------------------	---	------------------	---	---------------	---

'M318766:180719'

Printed on 01 Aug 2018

© 2018 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)