# **Product Datasheet**

# IRS1 [p Ser307] Antibody - BSA Free NBP1-78078

Unit Size: 0.1 mg

Store at -20C short term. Aliquot and store at -80C long term. Avoid freeze-thaw cycles.

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## NBP1-78078

IRS1 [p Ser307] Antibody - BSA Free

| Product Information         |   |
|-----------------------------|---|
| Unit Size                   | 0.1 mg  |
| Concentration               | Please see the vial label for concentration. If unlisted please contact technical services.   |
| Storage                     | Store at -20C short term. Aliquot and store at -80C long term. Avoid freeze-thaw cycles.  |
| Clonality                   | Polyclonal  |
| Preservative                | 0.01% Sodium Azide  |
| Isotype                     | IgG   |
| Purity                      | Immunogen affinity purified   |
| Buffer                      | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2  |
| Product Description         |   |
| Description                 | This affinity-purified antibody is directed against the phosphorylated form of<br>human IRS1 protein at the [p Ser307] residue. The product was affinity purified<br>from monospecific antiserum by immunoaffinity purification. Antiserum was first<br>purified against the phosphorylated form of the immunizing peptide. The<br>resultant affinity purified antibody was then cross-adsorbed against the non-<br>phosphorylated form of the immunizing peptide<br>Store vial at -20C prior to opening. Aliquot contents and freeze at -20C or below<br>for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if<br>not completely clear after standing at room temperature. This product is stable<br>for several weeks at 4C as an undiluted liquid. Dilute only prior to immediate use. |
| Host                        | Rabbit  |
| Gene ID                     | 3667  |
| Gene Symbol                 | IRS1  |
| Species                     | Human   |
| Reactivity Notes            | A BLAST analysis was used to suggest cross reactivity with IRS1 from human,<br>mouse, rat, dog and vervet monkey based on 100% homology with the<br>immunizing sequence. Partial reactivity is also expected against IRS1 from pig<br>(94%), bovine (94%) and chicken (88%) sources. Reactivity of this antibody with<br>IRS1 from other species is unknown.  |
| Specificity/Sensitivity     | This affinity-purified antibody is directed against the phosphorylated form of human IRS1 protein at the pS307 residue. The resultant affinity purified antibody was then cross-adsorbed against the non-phosphorylated form of the immunizing peptide. Reactivity occurs against human IRS1 pS307 protein and the antibody is specific for the phosphorylated form of the protein. Reactivity with non-phosphorylated human IRS1 is minimal by ELISA. A BLAST analysis was used to suggest cross reactivity with IRS1 from human, mouse, rat, dog and vervet monkey based on 100% homology with the immunizing sequence. Partial reactivity is also expected against IRS1 from pig (94%), bovine (94%) and chicken (88%) sources. Reactivity of this antibody with IRS1 from other species is unknown.               |
| Immunogen                   | This affinity purified IRS1 [p Ser307] Antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near amino acids 290-320 of human IRS1 protein. (Uniprot: P35568)  |
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#### **Product Application Details**



| Applications          | Western Blot, ELISA, Immunohistochemistry, Immunohistochemistry-Paraffin   |
|-----------------------|--|
| Recommended Dilutions | Western Blot 1:250-1:1500, ELISA 1:2000-1:10000, Immunohistochemistry 1:10-1:500, Immunohistochemistry-Paraffin 1:10-1:500   |
| Application Notes     | This affinity purified antibody has been tested for use in ELISA and western blot.<br>Specific conditions for reactivity should be optimized by the end user. Expect a<br>band approximately 130 kDa in size corresponding to phosphorylated IRS1<br>protein by western blotting in the appropriate cell lysate or extract. Minimal<br>reactivity is observed against the non-phosphorylated form of the immunizing<br>peptide. This antibody is phospho specific for pS307 of IRS1 protein. |

#### Images

Western Blot: IRS1 [p Ser307] Antibody [NBP1-78078] - Band at ~180 kDa believed to represent phosphorylated IRS1 (arrowhead). Lane 1 shows staining of human 293 cell lysate. Lane 2 shows staining of 293 cell lysate. The pronounced staining of the band at 180 kDa is not seen when the antibody was pre-incubated with immunizing peptide prior to reaction. The identity of the intensely reactive bands at ~70 kD in both lane 1 and 2 is unknown, although these bands were also competed out by pre-incubation with the immunizing peptide. (800 nm channel, green). Molecular weight estimation was made by comparison to prestained MW markers in lane M (700 nm channel, red).

170 -130 -100 -55 -40 -33 -

> 170 -130 -

55 40 33

Western blot using Affinity Purified anti-IRS1 pS307 antibody shows detection of a band at ~180 kDa believed to represent phosphorylated IRS1 (arrowhead). Lane 1 shows staining of human 293 cell lysate

#### **Publications**

Rufinatscha K, Radlinger B, Dobner J et al. Dipeptidyl peptidase-4 impairs insulin signaling and promotes lipid accumulation in hepatocytes. Biochem. Biophys. Res. Commun. 2017-02-16 [PMID: 28213130] (Human)





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# Products Related to NBP1-78078

| HAF008        | Goat anti-Rabbit IgG Secondary Antibody [HRP]       |
|---------------|---|
| NB7160        | Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP] |
| NBP2-24891    | Rabbit IgG Isotype Control                          |
| NBP2-68666PEP | IRS1 Recombinant Protein Antigen                    |

#### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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