



Rabbit Anti-phospho-IRS1 (Ser616) antibody

SL12710R

Product Name:	phospho-IRS1 (Ser616)
Chinese Name:	磷酸化胰岛素受体底物1抗体
Alias:	IRS1 (phospho S616); p-IRS1 (phospho S616); HIRS 1; HIRS1; Insulin Receptor Substrate 1; IRS 1; IRS-1; IRS1; IRS1 HUMAN; OTTHUMP00000164234
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	131kDa
Cellular localization:	The nucleuscytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human IRS1 around the phosphorylation site of Ser616:PM(p-S)PG
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene encodes a protein which is phosphorylated by insulin receptor tyrosine kinase. Mutations in this gene are associated with type II diabetes and susceptibility to insulin resistance. [provided by RefSeq, Nov 2009]

Function:

May mediate the control of various cellular processes by insulin. When phosphorylated by the insulin receptor binds specifically to various cellular proteins containing SH2 domains such as phosphatidylinositol 3-kinase p85 subunit or GRB2. Activates phosphatidylinositol 3-kinase when bound to the regulatory p85 subunit.

Subunit:

Interacts with UBTF and PIK3CA (By similarity). Interacts (via phosphorylated YXXM motifs) with PIK3R1 (By similarity). Interacts with ROCK1 and FER (By similarity). Interacts (via PH domain) with PHIP (By similarity). Interacts with GRB2 (By similarity). Interacts with SOCS7. Interacts (via IRS-type PTB domain) with IGF1R and INSR (via the tyrosine-phosphorylated NPXY motif). Interacts with ALK. Interacts with EIF2AK2/PKR (By similarity).

Post-translational modifications:

Serine phosphorylation of IRS1 is a mechanism for insulin resistance. Ser-312 phosphorylation inhibits insulin action through disruption of IRS1 interaction with the insulin receptor. Phosphorylation of Tyr-896 is required for GRB2-binding.

DISEASE:

Polymorphisms in IRS1 may be involved in the etiology of non-insulin-dependent diabetes mellitus (NIDDM) [MIM:125853].

Similarity:

Contains 1 IRS-type PTB domain.
Contains 1 PH domain.

SWISS:

P35568

Gene ID:

3667

Database links:

[Entrez Gene: 3667](#) Human

[Entrez Gene: 16367](#) Mouse

[Entrez Gene: 25467](#) Rat

[Omim: 147545](#) Human

[SwissProt: P35568](#) Human

[SwissProt: P35569](#) Mouse

[SwissProt: P35570](#) Rat

[Unigene: 471508](#) Human

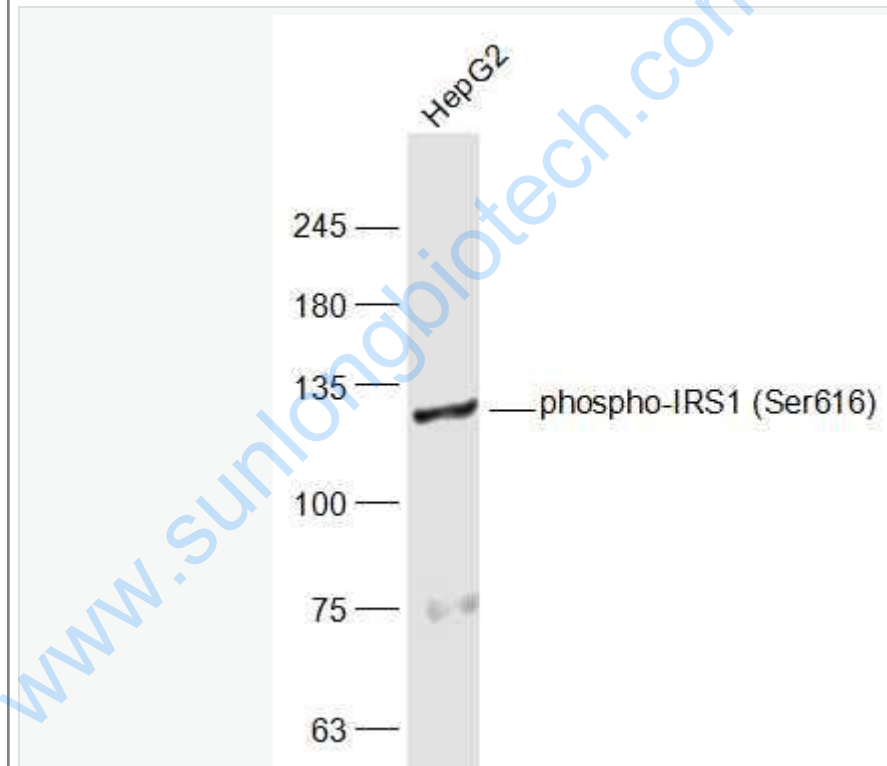
[Unigene: 4952](#) Mouse

[Unigene: 10476](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

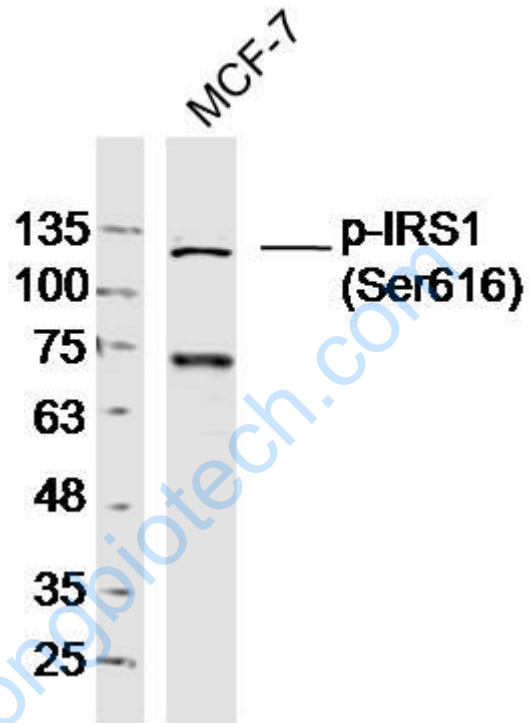
HepG2(Human) Cell Lysate at 30 ug

Primary: Anti-phospho-IRS1 (Ser616)? (SL12710R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 131 kD

Observed band size: 131 kD



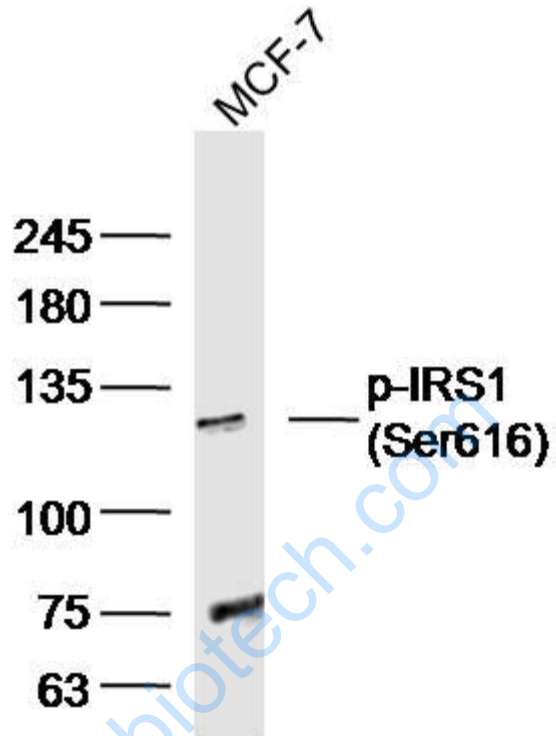
Sample: MCF-7 Cell (Human) Lysate at 40 ug

Primary: Anti-phospho-IRS1 (Ser616) (SL12710R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 131 kD

Observed band size: 131 kD



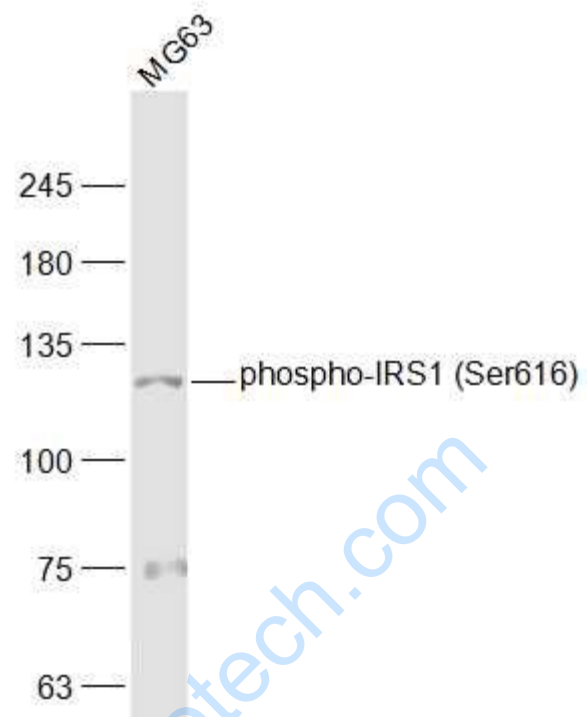
Sample: MCF-7 Cell (Human) Lysate at 40 ug

Primary: Anti-phospho-IRS1 (Ser616) (SL12710R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 131 kD

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Sample:

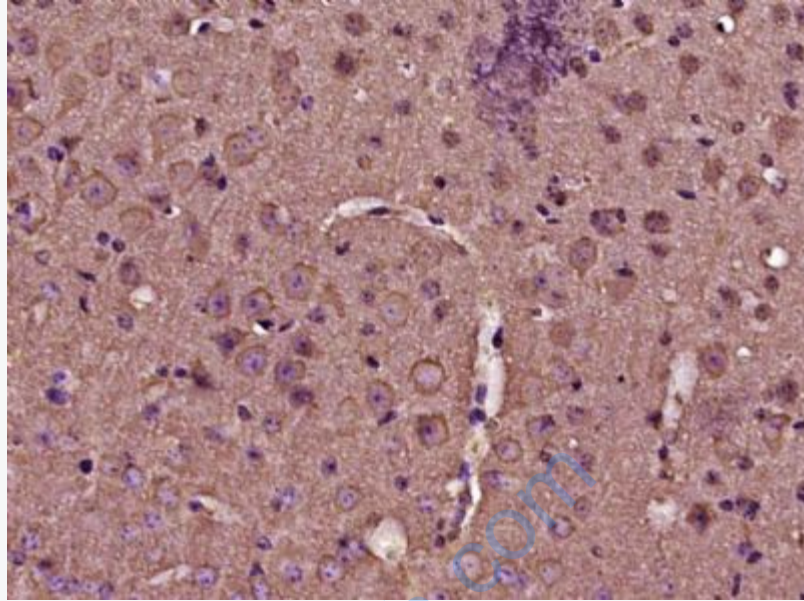
MG63(Human) Cell Lysate at 30 ug

Primary: Anti-phospho-IRS1 (Ser616)? (SL12710R) at 1/1000 dilution

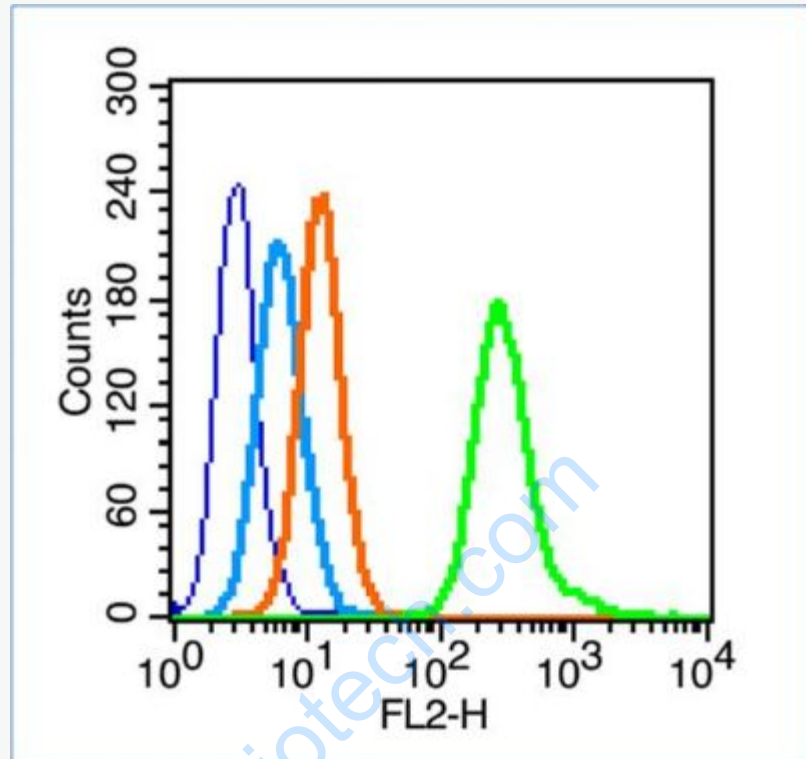
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 131 kD

Observed band size: 131 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-IRS1 (Ser616)) Polyclonal Antibody, Unconjugated (SL12710R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control (blue line): HeLa (fixed with 70% ethanol (Overnight at 4°C) and then permeabilized with 0.1% PBS-Tween for 20 min at room temperature).

Primary Antibody (green line): Rabbit Anti-phospho-IRS1 (Ser616) antibody (SL12710R), Dilution: 0.2µg /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE, Dilution: 1µg /test.