

## Phospho-IRS-1 (Ser312) Rabbit Polyclonal Antibody

### Catalog #: EAB14581

Host/Isotype	Clonality	Applications	MW (kDa)	Reactivity
Rabbit IgG	Polyclonal	WB, IHC-P, IF/ICC, ELISA	132	Human, Mouse, Rat

### Applications Dilutions

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>WB</b> (Western Blotting)	1:500-2000
<b>IHC-P</b> (Immunohistochemistry-Paraffin)	1:50-300
<b>IF/ICC</b> (Immunofluorescence/Immunocytochemistry)	1:50-300
<b>ELISA</b> (Enzyme-linked Immunosorbent Assay)	1:5000-20000

### Product Information

<b>Conjugate</b>	Unconjugate
<b>Specificity</b>	Phospho-IRS-1 (Ser312) Rabbit Polyclonal Antibody detects endogenous levels of IRS-1 only when phosphorylated at Ser312.
<b>Purification</b>	Affinity purification
<b>Concentration</b>	1mg/ml
<b>Format</b>	Liquid
<b>Formulation</b>	In PBS, pH 7.4, Containing 0.02% sodium azide, 0.5% BSA and 50% Glycerol
<b>Shipping</b>	Gel Pack
<b>Storage</b>	Store at -20°C least 1 year from the date of shipment. Avoid repeated freeze/thaw cycles. Aliquots may be stored at +4°C for 1-2 weeks
<b>UniProt ID</b>	<a href="#">P35568</a>
<b>Entrez-Gene ID</b>	<a href="#">3667</a>

### Product Description

IRS-1 is one of the major substrates of the insulin receptor kinase. IRS-1 contains multiple tyrosine phosphorylation motifs that serve as docking sites for SH2-domain containing proteins that mediate the metabolic and growth-promoting functions of insulin. IRS-1 also contains over 30 potential serine/threonine phosphorylation sites. Ser307 of IRS-1 is phosphorylated by JNK and IKK while Ser789 is phosphorylated by SIK-2, a member of the AMPK family. The PKC and mTOR pathways mediate phosphorylation of IRS-1 at Ser612 and Ser636/639, respectively. Phosphorylation of IRS-1 at Ser1101 is mediated by PKC $\theta$  and results in an inhibition of insulin signaling in the cell, suggesting a potential mechanism for insulin resistance in some models of obesity.

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