For Research Use Only

IRS1 Polyclonal antibody

Catalog Number:17509-1-AP Featured Product 75 Publications

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Basic Information

Catalog Number:
17509-1-AP

Size:
150ul , Concentration: 500 ug/ml by Nanodrop and 300 ug/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG11714

GenBank Accession Number:
BC053895

GeneID (NCBI):
3667

UNIPROT ID:
P35568

Full Name:
insulin receptor substrate 1

Calculated MW:
1242 aa, 132 kDa

Observed MW:
160-185 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:5000-1:50000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500
IF/ICC 1:50-1:500

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications:
WB, IHC, IF, IP, Dot blot

Species Specificity:
human

Cited Species:
human, mouse, rat, pig, megalobrama amblycephala

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : A549 cells, A431 cells, HEK-293 cells, PC-3 cells

IP : A549 cells,

IHC : human colon tissue, human breast cancer tissue, human liver tissue

IF/ICC : A549 cells,

Background Information

Ins receptor substrate 1 (IRS1) was the first cloned and characterized member of the IRS family which are involved in ins receptor (IR) and ins-like growth factor I receptor (IGF-IR) signaling. IRS1 is phosphorylated by ins receptor tyrosine kinase and is involved in various cellular processes including DNA repair fidelity, transcriptional activity, and cell growth can support tumor development and progression. Mutations in this gene are associated with type II diabetes and susceptibility to ins resistance. IRS1 has a predicted molecular weight of 132 kDa, however, as a result of its extensive serine phosphorylation it separates on a SDS gel as a band of approximately 160-185 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Yang Liu	36149580	Cell Stress Chaperones	WB
Hiroshi Senoo	34551282	Mol Cell	WB
Takashi Hara	36130217	Biosci Biotechnol Biochem	WB

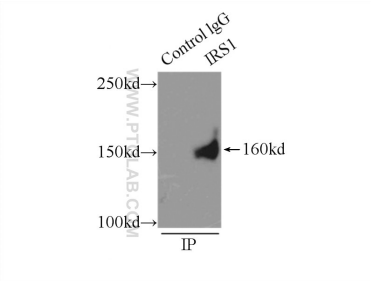
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

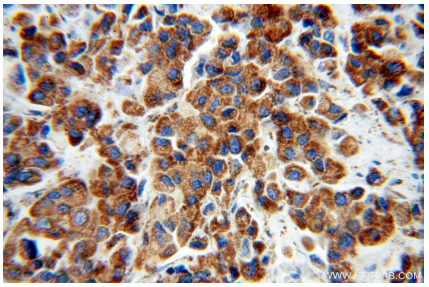
*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

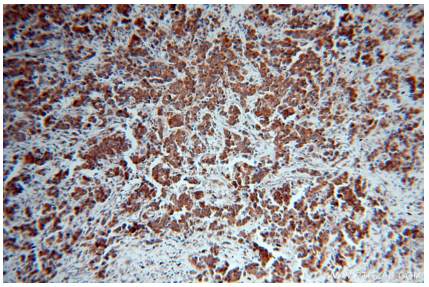
Selected Validation Data



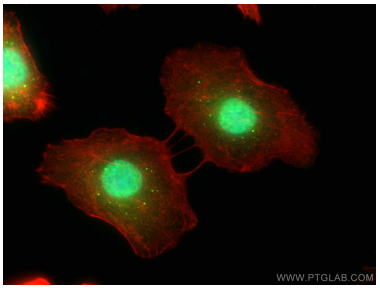
IP result of anti-IRS1 (IP:17509-1-AP, 5ug; Detection:17509-1-AP 1:1000) with A549 cells lysate 3500ug.



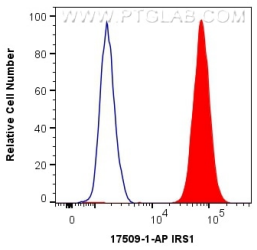
Immunohistochemical analysis of paraffin-embedded human breast cancer using 17509-1-AP (IRS1 antibody) at dilution of 1:100 (under 40x lens).



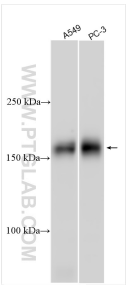
Immunohistochemical analysis of paraffin-embedded human breast cancer using 17509-1-AP (IRS1 antibody) at dilution of 1:100 (under 10x lens).



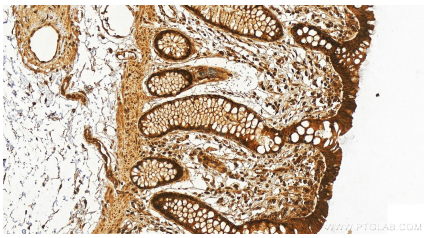
Immunofluorescent analysis of (4% PFA) fixed A549 cells using IRS1 antibody (17509-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).



1X10^6 MCF-7 cells were intracellularly stained with 0.4 ug Anti-Human IRS1 (17509-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Various lysates were subjected to SDS PAGE followed by western blot with 17509-1-AP (IRS1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 17509-1-AP (IRS1 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).