For Research Use Only

REDD1 specific Polyclonal ANTIBODY

Catalog Number:10638-1-AP Featured Product 158 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
10638-1-AP

Size:
80 µg/150 µl

Source:
Rabbit

Isotype:
IgG

Purification Method:
Antigen affinity purification

Immunogen Catalog Number:
AG0965

GenBank Accession Number:
BC007714

GeneID (NCBI):
54541

Full Name:
DNA-damage-inducible transcript 4

Calculated MW:
25 kDa

Observed MW:
35 kDa

Recommended Dilutions:
WB 1:500-1:2000
IP 0.5-4.0 ug for IP and 1:500-1:1000 for WB

Applications

Tested Applications:
IP, WB, ELISA

Cited Applications:
chIP, IF, IHC, IP, WB

Species Specificity:
human, mouse, rat

Cited Species:
human, Meriones unguiculatus, mouse, pig, rabbit, rat, sow

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

Positive Controls:

WB : K-562 cells; DU 145 cells, MCF-7 cells, LNCaP cells, Raji cells, PC-3 cells, A549 cells, Cobalt Chloride treated HeLa cells

IP : MCF-7 cells;

Background Information

REDD1, also named as RTP801 and DDIT4, belongs to the DDIT4 family. REDD1 promotes neuronal cell death. It is a novel transcriptional target of p53 implicated ROS in the p53-dependent DNA damage response. REDD1 controlled cell growth under energy stress, as an essential regulator of TOR activity through the TSC1/2 complex. REDD-1 expression has also been linked to apoptosis, Aβ toxicity and the pathogenesis of ischemic diseases. As an HIF-1-responsive gene, REDD-1 exhibits strong hypoxia-dependent upregulation in ischemic cells of neuronal origin[PMID: 19996311]. In response to stress due to DNA damage and glucocorticoid treatment, REDD-1 is upregulated at the transcriptional level[PMID: 21733849]. REDD-1 negatively regulates the mammalian target of Rapamycin, a serine/threonine kinase often referred to as mTOR[PMID: 22951983]. It is crucial in the coupling of extra- and intracellular cues to mTOR regulation. The absence of REDD-1 is associated with the development of retinopathy, a major cause of blindness[PMID: 22304497]. REDD1 is a new host defense factor, and chemical activation of REDD1 expression represents a potent antiviral intervention strategy[PMID: 21909097]. The calculated molecular weight of REDD1 is 25 kDa. Because of multiple lysines in the proteins, REDD1 often migrates around 35 kDa on Western blot[PMID: 19221489]. This antibody is a rabbit polyclonal antibody raised against full length human REDD1 antigen. This antibody is specific ti the REDD1 from siRNA experiment (PMID:24713927)

Notable Publications

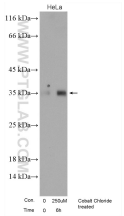
Author	Pubmed ID	Journal	Application
King Frank W FW	19789631	PLoS One	WB
B Morquette	25257176	Cell Death Differ	WB
Jennifer L Steiner	26394774	Alcohol Alcohol	WB

Storage

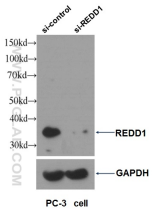
Storage:
Store at -20ºC. Stable for one year after shipment.
Storage Buffer:
PBS with 0.1% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20˚C storage

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

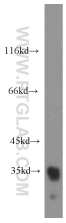
Selected Validation Data



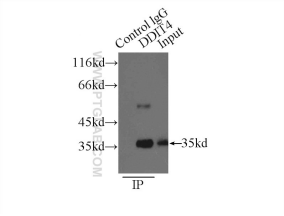
Various lysates were subjected to SDS PAGE followed by western blot with 10638-1-AP (REDD1 specific antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours



WB result of REDD1 antibody (10638-1-AP, 1:1000) with si-control and si-REDD1 transfected PC-3 cells.



K-562 cells were subjected to SDS PAGE followed by western blot with 10638-1-AP(REDD1 specific antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours



IP Result of anti-REDD1 specific (IP:10638-1-AP, 3ug; Detection:10638-1-AP 1:500) with MCF-7 cells lysate 2500ug.