

# REDD1 specific Polyclonal ANTIBODY

Catalog Number: 10638-1-AP

Featured Product

158 Publications

## 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 µg 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 to the REDD1 from siRNA experiment (PMID:24713927)

## Notable Publications

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

## Storage

**Storage:**

Store at -20°C. 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

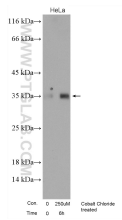
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

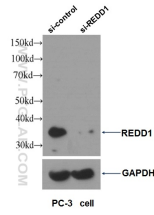
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

## Selected Validation Data



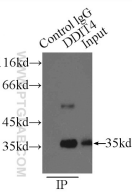
Various lysates were subjected to SDS PAGE followed by western blot with 10638-1-AP (REDD1 specific antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours



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.