

# REDD1 specific Polyclonal ANTIBODY

Catalog Number: 10638-1-AP

Featured Product

136 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 1:500-1:1000

## Applications

**Tested Applications:**

ELISA, IP, WB

**Cited Applications:**

IF, IHC, IP, WB

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human, Meriones unguiculatus, mouse, pig, rabbit, rat

**Positive Controls:**

WB : K-562 cells; PC-3 cells, PC-3 cells, MCF-7 cells, DU 145 cells, LNCaP cells, A549 cells, Raji 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 [PMD: 19996311]. In response to stress due to DNA damage and glucocorticoid treatment, REDD-1 is upregulated at the transcriptional level [PMD: 21733849]. REDD-1 negatively regulates the mammalian target of Rapamycin, a serine/threonine kinase often referred to as mTOR [PMD: 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 [PMD: 22304497]. REDD1 is a new host defense factor, and chemical activation of REDD1 expression represents a potent antiviral intervention strategy [PMD: 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 [PMD: 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 (PMD: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 -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

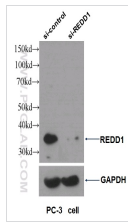
For technical support and original validation data for this product please contact:

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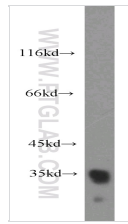
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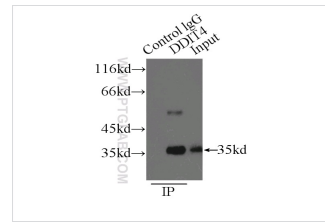
## Selected Validation Data



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.