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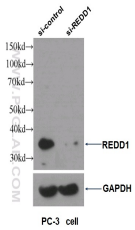
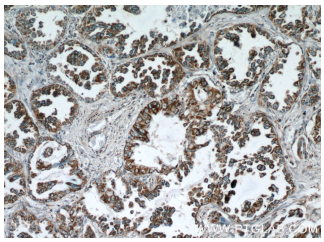
REDD1 specific Polyclonal Antibody

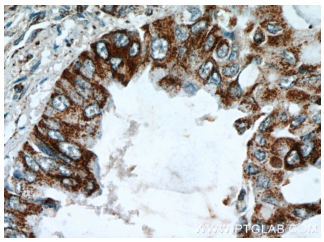
Catalog number: 10638-1-AP
Size: 80 µg/150 µl
Source: Rabbit
Isotype: IgG
Synonyms:
DDIT4; DDIT4, Dig2, FLJ20500, REDD 1, REDD1, RP11 442H21.1, RTP801



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



Immunohistochemical of paraffin-embedded human lung cancer using 10638-1-AP(REDD1 antibody) at dilution of 1:50 (under 10x lens)



Immunohistochemical of paraffin-embedded human lung cancer using 10638-1-AP(REDD1 antibody) at dilution of 1:50 (under 40x lens)

Background

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 offen 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)

Applications

Tested applications:	**ELISA, IHC, IP, WB**
Cited applications:	**IF, IHC, IP, WB**
Species specificity:	**Human, Mouse, Rat; other species not tested.**
Cited species:	**Gerbil, human, mouse, pig, rabbit, rat**
Calculated REDD1 specific MW:	**25 kDa**
Observed REDD1 specific MW:	**35 kDa**
Positive WB detected in	**K-562 cells, A549 cells, DU 145 cells, LNCaP cells, MCF7 cells, PC-3 cells, Raji cells**
Positive IP detected in	**MCF-7 cells**
Positive IHC detected in	**Human lung cancer tissue, human breast cancer tissue, human gliomas tissue, human heart tissue, human kidney tissue, human liver tissue, human pancreas cancer tissue, human placenta tissue, human spleen tissue, human testis tissue**
Recommended dilution:	**WB: 1:500-1:5000** **IP: 1:200-1:2000** **IHC: 1:20-1:200**

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

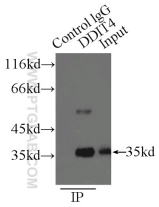
Immunogen information

Immunogen:	**Ag0965**
GenBank accession number:	**BC007714**
Gene ID (NCBI):	**54541**

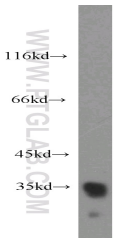
Full name:	**DNA-damage-inducible transcript 4**

Product information

Purification method:	**Antigen affinity purification**
Storage:	**PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C.**



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



K-562 cells were subjected to SDS PAGE followed by western blot with 10638-1-AP(REDD1 antibody) at dilution of 1:1000