REDD1 specific Polyclonal antibody

Catalog Number: 10638-1-AP

Basic Information

- **Catalog Number:** 10638-1-AP
- **Size:** 150μL, Concentration: 533 μg/ml by Bradford method using BSA as the standard
- **Source:** Rabbit
- **Isotype:** IgG
- **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

Purification Method: Antigen affinity purification
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
- **Cited Species:** human, Meriones unguiculatus, pig, rabbit

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: 21733846]. 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: 22306497]. REDD1 is a new host defense factor, and chemical activation of REDD1 expression represents a potent antibiviral 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

<table>
<thead>
<tr>
<th>Author</th>
<th>Pubmed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>King Frank W FW</td>
<td>19789631</td>
<td>PLoS One</td>
<td>WB</td>
</tr>
<tr>
<td>B Morquette</td>
<td>25257176</td>
<td>Cell Death Differ</td>
<td>WB</td>
</tr>
<tr>
<td>Jennifer L Steiner</td>
<td>26594774</td>
<td>Alcohol Alcohol</td>
<td>WB</td>
</tr>
</tbody>
</table>

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.
Non-treated Hela and Cobalt Chloride treated Hela cells 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 6 hours.

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

Various lysates 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.