

## Anti-REDD1 (Thr23/25) Antibody

Our Anti-REDD1 (Thr23/25) rabbit polyclonal phosphospecific primary antibody from PhosphoSolutions i Catalog # AN1538

# **Specification**

# Anti-REDD1 (Thr23/25) Antibody - Product Information

Primary Accession

Host
Clonality
Polyclonal
Isotype
Calculated MW

One of the polyclonal
Calculated MW

# Anti-REDD1 (Thr23/25) Antibody - Additional Information

Gene ID 54541

### **Other Names**

DDIT4 antibody, DDIT4\_HUMAN antibody, Dig2 antibody, DNA damage inducible transcript 4 antibody, DNA damage inducible transcript 4 protein antibody, DNA damage-inducible transcript 4 protein antibody, FLJ20500 antibody, HIF 1 responsive protein RTP801 antibody, HIF 1 responsive RTP801 antibody, HIF-1 responsive protein RTP801 antibody, Protein regulated in development and DNA damage response 1 antibody, REDD-1 antibody, REDD1 antibody, RTP801 antibody

### Target/Specificity

REDD1, Regulated in Development and DNA damage responses 1, is induced by hypoxia, cell stress, and apoptosis. Reduced REDD1 levels can sensitize cells towards apoptosis, where elevated levels of REDD1 induced by hypoxia can desensitize cells to apoptotic stimuli (Schwarzer et al, 2005). REDD1 has a crucial role in inhibiting mammalian rapamycin complex 1 (mTORC1) signaling during hypoxic stress (Katiyar et al, 2009). It has been shown that the rapid degradation of REDD1 is mediated by the CUL4A-DDB1-ROC1-b-TRCP E3 ligase complex and is regulated by REDD1 phosphorylation at Thr-25, Thr-23 and Ser-19 through the activity of GSK3b (Katiyar et al, 2009).

### **Format**

Antigen Affinity Purified from Pooled Serum

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

Anti-REDD1 (Thr23/25) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **Shipping**

Blue Ice

### Anti-REDD1 (Thr23/25) Antibody - Protocols

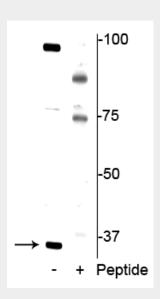




Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Anti-REDD1 (Thr23/25) Antibody - Images



Western blot of jurkat cell lysate showing specific immunolabeling of the  $\sim$ 34 kDa REDD1 protein phosphorylated at Thr23/25 in the first lane (-). Phosphospecificity is shown in the second lane (+) where Immunolabeling is blocked by the phosphopeptide used as antigen but not by the corresponding non-phosphopeptide (not shown).

### Anti-REDD1 (Thr23/25) Antibody - Background

REDD1, Regulated in Development and DNA damage responses 1, is induced by hypoxia, cell stress, and apoptosis. Reduced REDD1 levels can sensitize cells towards apoptosis, where elevated levels of REDD1 induced by hypoxia can desensitize cells to apoptotic stimuli (Schwarzer et al, 2005). REDD1 has a crucial role in inhibiting mammalian rapamycin complex 1 (mTORC1) signaling during hypoxic stress (Katiyar et al, 2009). It has been shown that the rapid degradation of REDD1 is mediated by the CUL4A-DDB1-ROC1-b-TRCP E3 ligase complex and is regulated by REDD1 phosphorylation at Thr-25, Thr-23 and Ser-19 through the activity of GSK3b (Katiyar et al, 2009).