For Research Use Only

## CoraLite® Plus 488-conjugated REDD1 specific Polyclonal antibody



Catalog Number: CL488-10638

Featured Product

**Basic Information** 

Catalog Number: CL488-10638

1000 µ g/ml
Source:
Rabbit
Isotype:

gG DNA-damage-inducible transcript 4

Immunogen Catalog Number:Calculated MW:AG096525 kDa

Observed MW: 32-35 kDa

BC007714

54541

Q9NX09

Full Name:

GeneID (NCBI):

**UNIPROT ID:** 

GenBank Accession Number:

Purification Method: Antigen affinity purification Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

Applications

Tested Applications:

FC (Intra)

Species Specificity:

human, mouse

## **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 TSC 1/2 complex. REDD-1 expression has also been linked to apoptosis, A  $\beta$  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: 2304497]. 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 to the REDD1 from siRNA experiment (PMID: 24713927)

Storage

Storage:

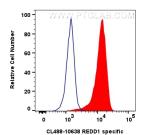
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



1x10^6 K-562 cells were intracellularly stained with 0.8 ug Coralite® Plus 488 Redd1 Specific Polyclonal Antibody (CL488-10638)(red), or 0.8 ug CoraLite® Plus 488-conjugated Rabbit 1gG control Rabbit PolyAb (CL488-3000) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).