For Research Use Only

CoraLite® Plus 488-conjugated REDD1 specific Polyclonal antibody

Catalog Number:CL488-10638 Featured Product

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Antibodies | ELISA kits | Proteins
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Basic Information

Catalog Number:
CL488-10638

Concentration:
1000 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG0965

GenBank Accession Number:
BC007714

GeneID (NCBI):
54541

UNIPROT ID:
Q9NX09

Full Name:
DNA-damage-inducible transcript 4

Calculated MW:
25 kDa

Observed MW:
32-35 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
FC (Intra): 0.80 ug per 10^6 cells in a 100 μl suspension

Excitation/Emission maxima wavelengths:
493 nm / 522 nm

Applications

Tested Applications:
FC (Intra)

Species Specificity:
human, mouse

Positive Controls:

FC (Intra) : K-562 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[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 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, pH7.3
Aliquoting is unnecessary for -20°C storage

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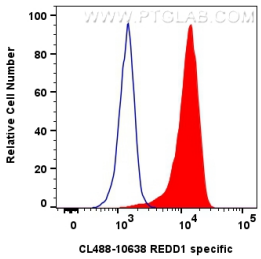
Selected Validation Data



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 IgG control Rabbit PolyAb (CL488-30000) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).