ARG52412
anti-REDD1 phospho (Thr23 / Thr25) antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes REDD1 phospho (Thr23 / Thr25)
Tested Reactivity	Hu
Predict Reactivity	Chimp
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	REDD1
Species	Human
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Thr23/25 conjugated to KLH
Conjugation	Un-conjugated
Alternate Names	DNA damage-inducible transcript 4 protein; REDD-1; REDD1; HIF-1 responsive protein RTP801; Dig2; Protein regulated in development and DNA damage response 1

Application Instructions

Application table

Application	Dilution
WB	1:500

Application Note: Specific for the ~34k REDD1 phosphorylated at Thr23/25. Immunolabeling is blocked by the phosphopeptide used as antigen but not by the corresponding dephosphopeptide.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

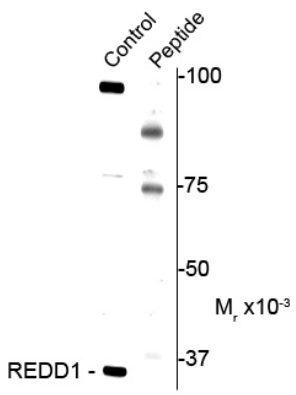
Properties

Form	Liquid
Purification	Affinity Purified
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol
Stabilizer	0.1 mg/ml BSA, 50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 54541 Human Swiss-port # Q9NX09 Human
Gene Symbol	DDIT4
Gene Full Name	DNA-damage-inducible transcript 4
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).
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Gene Regulation antibody; Metabolism antibody
Calculated Mw	25 kDa
PTM	Phosphorylated by GSK3B; this promotes proteasomal degradation. Polyubiquitinated by a DCX (DDB1-CUL4A-RBX1) E3 ubiquitin-protein ligase complex with BTRC as substrate-recognition component, leading to its proteasomal degradation.

Images



ARG52412 anti-REDD1 phospho (Thr23 / Thr25) antibody WB image

Western blot: Human jurkat lysate showing specific immunolabeling of the ~34k REDD1 protein phosphorylated at Thr 23/25 (control) stained with ARG52412 anti-REDD1 phospho (Thr23 / Thr25) antibody.
Immunolabeling is blocked by the phospho-peptide used as antigen (peptide).
.