

## Product datasheet for **AP13249PU-N**

### DDIT4 (N-term) Rabbit Polyclonal Antibody

#### Product data:

|                       |   |
|-----------------------|---|
| Product Type:         | Primary Antibodies  |
| Applications:         | IHC, WB   |
| Recommended Dilution: | ELISA: 1/1,000.<br>Western blotting: 1/50 - 1/100.<br>Immunohistochemistry: 1/50.   |
| Reactivity:           | Human   |
| Host:                 | Rabbit  |
| Isotype:              | Ig  |
| Clonality:            | Polyclonal  |
| Immunogen:            | This antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide selected from the C-terminal region of human DDIT4. |
| Specificity:          | This antibody reacts to DDIT4.  |
| Formulation:          | PBS with 0.09% (W/V) sodium azide<br>State: Purified<br>State: Liquid purified Ig   |
| Concentration:        | lot specific  |
| Purification:         | Protein G column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS                           |
| Conjugation:          | Unconjugated  |
| Storage:              | Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.<br>Avoid repeated freezing and thawing.             |
| Stability:            | Shelf life: one year from despatch.   |
| Gene Name:            | DNA damage inducible transcript 4   |
| Database Link:        | <a href="#">Entrez Gene 54541 Human Q9NX09</a>  |



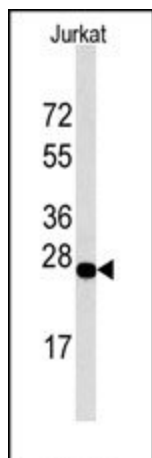
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**Background:**

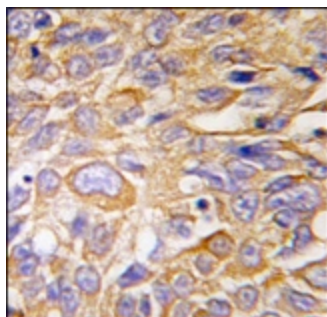
REDD1 is a novel transcriptional target of p53 induced following DNA damage. During embryogenesis, REDD1 expression mirrors the tissue-specific pattern of the p53 family member p63, and TP63 null embryos show virtually no expression of REDD1, which is restored in mouse embryo fibroblasts following p63 expression. In differentiating primary keratinocytes, TP63 and REDD1 expression are coordinately downregulated, and ectopic expression of either gene inhibits in vitro differentiation. REDD1 appears to function in the regulation of reactive oxygen species (ROS); TP63 null fibroblasts have decreased ROS levels and reduced sensitivity to oxidative stress, which are both increased following ectopic expression of either TP63 or REDD1. Thus, REDD1 encodes a shared transcriptional target that implicates ROS in the p53-dependent DNA damage response and in p63-mediated regulation of epithelial differentiation.

**Synonyms:**

DNA-damage-inducible transcript 4, DDIT-4, REDD1, REDD-1, RTP801, HIF-1 responsive protein, Dig2

**Product images:**

Western blot analysis of DDIT4 Antibody (N-term) in Jurkat cell line lysates (35ug/lane). DDIT4 (arrow) was detected using the purified Pab (1:60 dilution).



Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with DDIT4 antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining.