

## **Product datasheet for TA392804S**

# PRKCBP1 (ZMYND8) Rabbit Polyclonal Antibody

### **Product data:**

**Product Type:** Primary Antibodies

Applications: WB

**Reactivity:** WB: 1:500~1:1000 Human, Mouse, Rat

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

**Immunogen:** Synthetic peptide, corresponding to amino acids 578-538 of Human Rack7.

**Specificity:** Rack7 (Q608) polyclonal antibody detects endogenous levels of Rack7 protein.

Formulation: Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

Concentration: 1mg/ml

Conjugation: Unconjugated

Storage: Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

Stability: 1 year

**Predicted Protein Size:** ~ 180 kDa

**Gene Name:** zinc finger MYND-type containing 8

**Database Link:** Entrez Gene 23613 Human

<u>Q9ULU4</u>



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#### Background:

Zinc finger MYND domain-containing protein 8 (ZMYND8), also referred to as receptor for activated C-kinase 7 (Rack7) and protein kinase C-binding protein 1 (PRKCBP1), is a DNA damage response protein and a transcriptional regulator that is a close homolog of ZMYND11 (BS69). ZMYND8 binds to H3K36me2 and H4K16ac, two histone marks associated with active transcription. This protein is targeted to sites of DNA damage within actively transcribed genes, and recruits the H3K4me3-specific histone demethylase KDM5A/JARID1A and nucleosome remodeling and histone deacetylation (NuRD) complex. Together, these protein complexes mediate transcriptional repression and allow for subsequent doublestrand break repair via homologous recombination. ZMYND8 contains a bromodomain and a PWWP domain near its N-terminus, and a MYND domain towards the C-terminus, the latter of which mediates interaction with the NuRD complex. ZMYND8 also functions to recruit the H3K4me3-specific histone demethylase KDM5C/JARID1C to enhancer and super-enhancer regions, and functions as a negative regulator of gene expression. ZMYND8 and JARID1C are both putative tumor suppressor proteins, and knockdown of either of these proteins leads to derepression of S100 oncogenes. ZMYND8 expression is altered in breast and cervical cancer, and has been found to be translocated with RELA in at least one patient with acute erythroid leukemia. Knock-down of ZMYND8 expression in breast cancer cell lines increases anchorageindependent cell growth, cell migration and invasion, and tumor growth in mouse xenograft models.

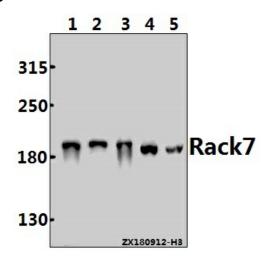
Synonyms:

CTCL-associated antigen se14-3; Cutaneous T-cell lymphoma-associated antigen se14-3; KIAA1125; PRKCBP1; Protein kinase C-binding protein 1; RACK7; Rack7; Zinc finger MYND domain-containing protein 8; ZMYND8

Note:

For research use only, not for use in diagnostic procedure.

## **Product images:**



Western blot (WB) analysis of Rack7 (Q608) polyclonal antibody at 1:500 dilution Lane1:A549 whole cell lysate(20ug) Lane2:Panc1 whole cell lysate(10ug) Lane3:A375 whole cell lysate(20ug) Lane4:C6 whole cell lysate(30ug) Lane5:BV2 whole cell lysate(40ug)