

# VPRBP Rabbit mAb [LH80]

Cat NO. :A23752

#### Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB,IHC,ICC/IF	H,M,R	Q9Y4B6	169 kDa	Rabbit	IgG	100ul,200ul

Applications detail:

Application Dilution
WB 1:1000-2000
IHC 1:100
ICC/IF 1:100
The optimal dilutions should be determined by the end user

Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

Endogenous

Purification:

Protein A purification

Specificity:

Antibody is produced by immunizing animals with a synthetic peptide at the sequence of human VPRBP

### Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

 $\label{products} \textbf{Products are valid for one natural year of receipt.} \textbf{Avoid repeated freeze} \ \textit{I} \ \textbf{thaw cycles}.$ 

### Tissue specificity:

Ubiquitously expressed..

# Subcellular location:

Cytoplasm. Nucleus.

#### Function:

Acts both as a substrate recognition component of E3 ubiquitin-protein ligase complexes and as an atypical serine/threonine-protein kinase, playing key roles in various processes such as cell cycle, telomerase regulation and histone modification. Probable substrate-specific adapter of a DCX (DDB1-CUL4-X-box) E3 ubiquitin-protein ligase complex, named CUL4A-RBX1-DDB1-DCAF1/VPRBP complex, which mediates ubiquitination and proteasome-dependent degradation of proteins such as NF2. Involved in the turnover of methylated proteins: recognizes and binds methylated proteins via its chromo domain, leading to ubiquitination of target proteins by the RBX1-DDB1-DCAF1/VPRBP complex (PubMed:23063525). The CUL4A-RBX1-DDB1-DCAF1/VPRBP complex is

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/
Immunofluorescence F: Flow Cytometry

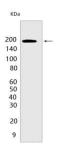
Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus MI: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse



also involved in B-cell development: DCAF1 is recruited by RAG1 to ubiquitinate proteins, leading to limit errorprone repair during V(D)J recombination. Also part of the EDVP complex, an E3 ligase complex that mediates ubiquitination of proteins such as TERT, leading to TERT degradation and telomerase inhibition (PubMed:23362280). Also acts as an atypical serine/threonine-protein kinase that specifically mediates phosphorylation of 'Thr-120' of histone H2A (H2AT120ph) in a nucleosomal context, thereby repressing transcription. H2AT120ph is present in the regulatory region of many tumor suppresor genes, down-regulates their transcription and is present at high level in a number of tumors (PubMed:24140421). Involved in JNKmediated apoptosis during cell competition process via its interaction with LLGL1 and LLGL2 (PubMed:20644714).., (Microbial infection) In case of infection by HIV-1 virus, it is recruited by HIV-1 Vpr in order to hijack the CUL4A-RBX1-DDB1-DCAF1/VPRBP function leading to arrest the cell cycle in G2 phase, and also to protect the viral protein from proteasomal degradation by another E3 ubiquitin ligase. The HIV-1 Vpr protein hijacks the CUL4A-RBX1-DDB1-DCAF1/VPRBP complex to promote ubiquitination and degradation of proteins such as TERT and ZIP/ZGPAT.., (Microbial infection) In case of infection by HIV-2 virus, it is recruited by HIV-2 Vpx in order to hijack the CUL4A-RBX1-DDB1-DCAF1/VPRBP function leading to enhanced efficiency of macrophage infection and promotion of the replication of cognate primate lentiviruses in cells of monocyte/macrophage lineage..

## Validation Data:

### VPRBP Rabbit mAb [LH80] Images



Western blot (SDS PAGE) analysis of extracts from K562 cells.Using VPRBPRabbit mAb [LH80] at dilution of 1:1000 incubated at 4°C over night.

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