

Rabbit Anti-CAF1p55/VPRBP/AP Conjugated antibody

SL9393R-AP

Product Name	Anti-CAF1p55/VPRBP/AP
Chinese Name	碱性磷酸酶（AP）标记的染色质组装因子 1P55 抗体
Alias	Caf 1; CAF-1; CAF-1 P55 subunit; CAF1 p55 subunit; p55/DCAF1; CAF1A; CAF1P55; chaf1b; Chromatin assembly factor 1 p55 subunit; Chromatin assembly factor 1 p60 subunit; chromatin assembly factor 1 subunit; Chromatin assembly factor I; dCAF-1; dCAF1; Human chromatin assembly factor-I p55 subunit; Nucleosome remodeling factor 55 kDa subunit; NURF 55; NURF-55; p55; Probable histone binding protein Caf1; VPRBP_HUMAN.
Research Area	Cell biology transcriptional regulatory factor Epigenetics
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Rat(predicted:Mouse,Rabbit)
Applications	WB=1:500-2000, IHC-P=1:100-500, IHC-F=1:100-500, IF=1:200-800 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	169kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human p55/DCAF1
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	background:

P55 is an extensively palmitoylated erythrocyte membrane protein, and a member of the MAGUK family. P55 also resists salt extraction, resulting in a high affinity for the plasma membrane. P55 contains a PDZ/DHR domain, a conserved SH-3 domain that appears to suppress tyrosine kinase activity of various oncoproteins, a 39-amino acid motif that binds to cytoskeletal protein 4.1R, and a guanylate kinase-like domain. Interaction with glycophorin C (GPC) and 4.1R suggests that p55 may play a role in the dynamic regulation in the erythrocyte membrane. In addition, p55 gene expression in vivo may be associated with a CpG island. P55 is constitutively expressed in K562 erythroleukemia cells during erythropoiesis and undergoes a 2-fold amplification after induction.

Function:

Component of the CUL4A-RBX1-DDB1-VprBP/DCAF1 E3 ubiquitin-protein ligase complex, VprBP/DCAF1 may function as the substrate recognition module within this complex. For example, VprBP/DCAF1 targets NF2 to the E3 ubiquitin-ligase complex for ubiquitination and subsequent proteasome-dependent degradation. In case of infection by HIV-1 virus, it is recruited by HIV-1 Vpr in order to hijack the CUL4A-RBX1-DDB1 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. In case of infection by HIV-2 virus, it is recruited by HIV-2 Vpx in order to hijack the CUL4A-RBX1-DDB1 function leading to enhanced efficiency of macrophage infection and promotion of the replication of cognate primate lentiviruses in cells of monocyte/macrophage lineage. Associated with chromatin in a DDB1-independent and cell cycle-dependent manner, VprBP/DCAF1 is recruited to chromatin as DNA is being replicated and is released from chromatin before mitosis.

Subunit:

Component of the CUL4A-RBX1-DDB1-VprBP/DCAF1 E3 ubiquitin-protein ligase complex that could interact with HIV-1 virus Vpr protein and HIV-2 virus Vpx protein. Interacts directly with DDB1. Also forms a ternary complex with DDA1 and DDB1. Interacts with NF2 (via FERM domain). Component of EDD/UBR5-DDB1-VprBP/DCAF1 E3 ubiquitin-protein ligase complex. Associates with the E3 ligase complex containing DYRK2, EDD/UBR5, DDB1 and VPRBP proteins (EDVP complex). Interacts directly with DYRK2.

Subcellular Location:

Cytoplasm. Nucleus.

Tissue Specificity:

Ubiquitously expressed.

Similarity:

Belongs to the VPRBP/DCAF1 family.

Contains 1 LisH domain.

Contains 5 WD repeats.

Database links:

[Entrez Gene: 9730](#) Human

[Entrez Gene: 321006](#) Mouse

[Entrez Gene: 315987](#) Rat

[SwissProt: Q9Y4B6](#) Human

[SwissProt: Q80TR8](#) Mouse

[Unigene: 716623](#) Human

[Unigene: 440089](#) Mouse

[Unigene: 32961](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.