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HIP116A Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6812c

Specification

HIP116A Antibody (Center) - Product Information

Application	**FC, WB,E**
Primary Accession	Q14527
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**113929**
Antigen Region	**409-437**

HIP116A Antibody (Center) - Additional Information

Gene ID 6596

Other Names
Helicase-like transcription factor, 364-, 632-, DNA-binding protein/plasminogen activator inhibitor 1 regulator, HIP116, RING finger protein 80, SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily A member 3, Sucrose nonfermenting protein 2-like 3, HLTF, HIP116A, RNF80, SMARCA3, SNF2L3, ZBU1

Target/Specificity
This HIP116A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 409-437 amino acids from the Central region of human HIP116A.

Dilution
FC~~1:10~50
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
HIP116A Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

HIP116A Antibody (Center) - Protein Information

Name HLTF (HGNC:11099)

Function Functions as a DNA-dependent ATPase and E3 ubiquitin-protein ligase involved in chromatin regulation and DNA damage tolerance (DDT) (PubMed:18316726, PubMed:18719106, PubMed:26051180, PubMed:31960921, PubMed:39142279, PubMed:40680746). Catalyzes 'Lys-63'-linked polyubiquitination of monoubiquitinated PCNA at 'Lys-164' in response to genotoxic stress, promoting error-free postreplication repair via template switching (PubMed:18316726, PubMed:18719106). Acts as an epigenetic regulator by promoting recruitment of DNMT1, thereby ensuring DNA methylation inheritance: specifically binds histone H3 trimethylated at 'Lys-9' (H3K9me3) and mediates histone H3 'Lys-23' polyubiquitination (H3K23ub), a docking site for DNMT1, leading to DNMT1 recruitment and replication-coupled DNA methylation maintenance (PubMed:40680746). Catalyzes formation of H3K23ub in two steps: first mediates monoubiquitination together with UBE2E1 and UBE2D2, and then extends ubiquitin chains via 'Lys-63'-linked ubiquitination together with UBE2N and UBE2V2 (PubMed:40680746). Also acts as a chromatin redodeling factor, thereby regulating transcription (PubMed:10391891, PubMed:1994885, PubMed:9126292). Exhibits ATP-dependent double-stranded DNA (dsDNA) translocase activity but lacks classical helicase activity; mediates replication fork reversal by concertedly unwinding and annealing nascent and parental strands, thereby suppressing DNA synthesis and maintaining genomic stability (PubMed:1994885). Resolves G-quadruplex (G4) DNA structures in cooperation with MSH2, limiting replication stress and G4 accumulation across the cell cycle (PubMed:39142279). Contributes to nucleotide excision repair by evicting lesion-containing oligonucleotides using its HIRAN and ATPase domains (PubMed:26051180). Can displace single-stranded DNA from triplex structures through ATP-dependent dsDNA translocation (PubMed:26051180, PubMed:31960921). Also has protein clearing activity at the stalled replication fork, facilitating restart of DNA replication (PubMed:21795603).

Cellular Location
Nucleus. Chromosome

Tissue Location
Expressed in brain, heart, kidney, liver, lung, pancreas, placenta and skeletal muscle.

HIP116A Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HIP116A Antibody (Center) - Images

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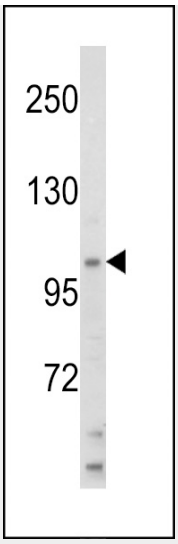
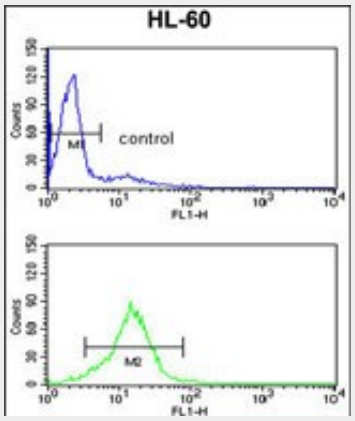


Western blot analysis of HIP116A Antibody (Center) (Cat. #AP6812c) in HL60 cell line lysates (35ug/lane). HIP116A (arrow) was detected using the purified Pab.



HIP116A Antibody (Center) (Cat. #AP6812c) flow cytometry analysis of HL-60 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

HIP116A Antibody (Center) - Background

HIP116A is a member of the SWI/SNF family. Members of this family have helicase and ATPase activities and are thought to regulate transcription of certain genes by altering the chromatin structure around those genes. This protein contains a RING finger DNA binding motif.

HIP116A Antibody (Center) - References

Ding,H., et.al., DNA Cell Biol. 15 (6), 429-442 (1996)