RbAp46/48 antibody (pAb)

Catalog Nos: 39198, 39199

RRID: AB_2615007
Isotype: Serum
Application(s): ChIP, WB
Reactivity: Human, Wide Range Predicted

Volumes: 100 µl, 10 µl
Purification: None
Host: Rabbit
Molecular Weight: 46 and 48 kDa

Background: RbAp46 (Retinoblastoma protein associated protein 46) and RbAp48 (Retinoblastoma protein associated protein 48) are highly homologous histone chaperones that play key roles in protein complexes that function to establish and maintain chromatin structure. RbAp46/48 are found in a number of protein complexes involved in chromatin remodeling (Mi-2β, NURF & NURD), transcriptional repression (Prc2, Sin3) and chromatin assembly (CAF1). Both RbAp46 and RbAp48 are specifically found in the catalytic cores of histone deacetylase (HDAC) complexes that promote transcriptional repression of target genes, including those repressed by the retinoblastoma tumor suppressor protein.

RbAp46 binds to and enhances the activity of the type B histone acetyltransferase HAT1, an enzyme that acetylates histone H4 specifically at its Lys5 and Lys12 residues prior to their incorporation into nucleosomes during replication.

RbAp48 is an evolutionarily conserved subunit of the chromatin assembly factor-1 (CAF-1) complex, where it associates with two other subunits, known as p150 and p60 in human cells. It is also reported that E2F-1 and RbAp48 are physically associated in the presence of RB1 and histone deacetylase, suggesting that RbAp48 could be involved in transcriptional repression of E2F-responsive genes.

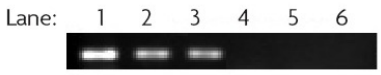
Immunogen: This RbAp46/48 antibody was raised against recombinant human RbAp46 protein.

Buffer: Rabbit serum containing 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

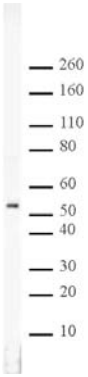
Application Notes:
Applications Validated by Active Motif:
ChIP: 4 µl per ChIP
WB*: 1:500 - 1:2,000 dilution

*Note: many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western blot.

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.



RbAp46/48 antibody (pAb) tested by ChIP
ChIP performed on MCF7 cell chromatin (40 µg) using 39198. PCR was performed using primers specific for the promoter region of the human SNAIL gene. Lane 1: Input DNA control. Lane 2: ChIP using 4 µl of 39198. Lane 3: Duplicate. Lane 4: Rabbit IgG as control (-). Lane 5: Duplicate. Lane 6: PCR mix.



RbAp46/48 pAb tested by Western blot.
HeLa cell nuclear extract (10 µg per lane) was probed with RbAp46/48 pAb (1:500 dilution).