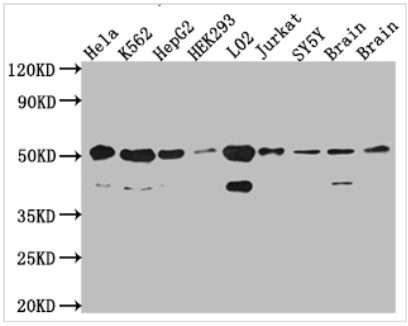
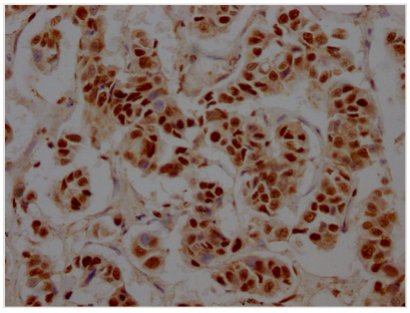
RBBP4 Recombinant Monoclonal Antibody

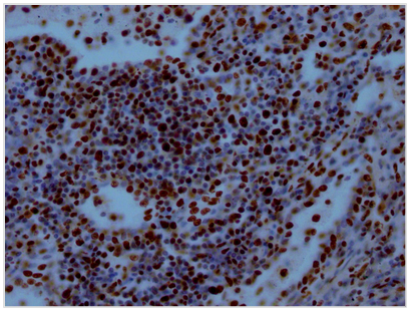
Product Code	CSB-RA915915A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q09028
Immunogen	A synthesized peptide derived from human RbAp48
Species Reactivity	Human, Mouse, Rat
Tested Applications	ELISA, WB, IHC, IF; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200
Relevance	Core histone-binding subunit that may target chromatin assembly factors, chromatin remodeling factors and histone deacetylases to their histone substrates in a manner that is regulated by nucleosomal DNA. Component of several complexes which regulate chromatin metabolism. These include the chromatin assembly factor 1 (CAF-1) complex, which is required for chromatin assembly following DNA replication and DNA repair; the core histone deacetylase (HDAC) complex, which promotes histone deacetylation and consequent transcriptional repression; the nucleosome remodeling and histone deacetylase complex (the NuRD complex), which promotes transcriptional repression by histone deacetylation and nucleosome remodeling; the PRC2/EED-EZH2 complex, which promotes repression of homeotic genes during development; and the NURF (nucleosome remodeling factor) complex.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling; Cancer
Gene Names	RBBP4
Clone No.	3E9
Image	



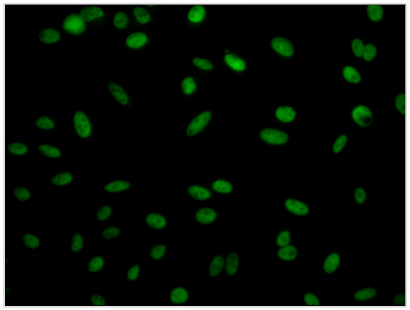
Western Blot
Positive WB detected in: Hela whole cell lysate, K562 whole cell lysate, HepG2 whole cell lysate, HEK293 whole cell lysate, L02 whole cell lysate, Jurkat whole cell lysate, SH-SY5Y whole cell lysate, Mouse Brain whole cell lysate, Rat Brain cell lysate
All lanes: RbAp48 antibody at 1:1000
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 48, 48, 47, 44 kDa
Observed band size: 53, 40 kDa



IHC image of CSB-RA915915A0HU diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC image of CSB-RA915915A0HU diluted at 1:100 and staining in paraffin-embedded human lung tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



Immunofluorescence staining of Hela Cells with CSB-RA915915A0HU at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4?. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

The process of producing an RBBP4 recombinant antibody involves four stages: firstly, sequencing the RBBP4 monoclonal antibody gene; secondly, inserting the gene into a plasmid vector; thirdly, introducing the recombinant vector into a host cell line; and fourthly, purifying the RBBP4 recombinant monoclonal antibody from the cell culture supernatant through affinity chromatography. The RBBP4 monoclonal antibody is created from hybridomas that produce RBBP4 antibodies, and a synthesized peptide derived from human RBBP4 is used as

the immunogen during the production process. This recombinant RBBP4 monoclonal antibody is recommended for use in ELISA, WB, IHC, and IF applications to detect RBBP4 protein from human, mouse, and rat samples.RBBP4 is involved in epigenetic regulation, cell cycle regulation, DNA repair, and development.

RBBP4 is a component of several chromatin-modifying complexes, including the HDAC complex and the nucleosome remodeling, and the NuRD complex, which play important roles in the regulation of gene expression by modifying chromatin structure. As a key regulator of the G1/S transition of the cell cycle, RBBP4 interacts with the retinoblastoma tumor suppressor protein (RB) to promote cell cycle arrest in response to DNA damage or other stresses. RBBP4 plays a role in DNA double-strand break repair by interacting with the DNA repair protein RAD51. RBBP4 is involved in embryonic development, as knockout studies have shown that it is required for early embryonic development and is involved in the differentiation of various cell types.