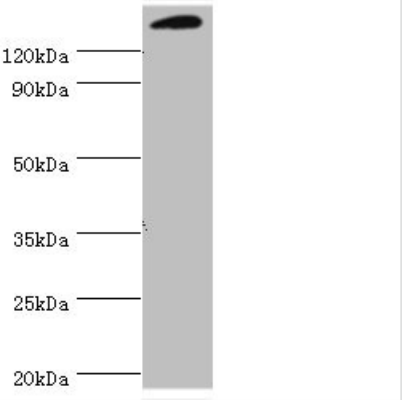
SMARCC2 Antibody

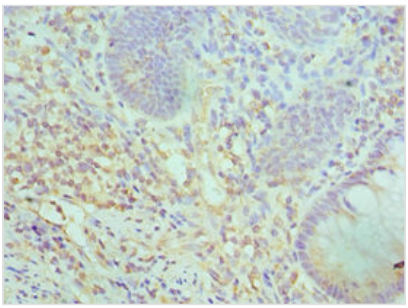
Product Code	CSB-PA851527ESR2HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q8TAQ2
Immunogen	Recombinant Human SWI/SNF complex subunit SMARCC2 protein (300-650AA)
Raised In	Rabbit
Species Reactivity	Human, Mouse
Tested Applications	ELISA, WB, IHC, ChIP; Recommended dilution: WB:1:1000-1:5000, IHC:1:20-1:200
Relevance	Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). Can stimulate the ATPase activity of the catalytic subunit of these complexes. May be required for CoREST dependent repression of neuronal specific gene promoters in non-neuronal cells. Also involved in vitamin D-coupled transcription regulation via its association with the WINAC complex, a chromatin-remodeling complex recruited by vitamin D receptor (VDR), which is required for the ligand-bound VDR-mediated transrepression of the CYP27B1 gene. Belongs to the neural progenitors-specific chromatin remodeling complex (npBAF complex) and the neuron-specific chromatin remodeling complex (nBAF complex). During neural development a switch from a stem/progenitor to a post-mitotic chromatin remodeling mechanism occurs as neurons exit the cell cycle and become committed to their adult state. The transition from proliferating neural stem/progenitor cells to post-mitotic neurons requires a switch in subunit composition of the npBAF and nBAF complexes. As neural progenitors exit mitosis and differentiate into neurons, npBAF complexes which contain ACTL6A/BAF53A and PHF10/BAF45A, are exchanged for homologous alternative ACTL6B/BAF53B and DPF1/BAF45B or DPF3/BAF45C subunits in neuron-specific complexes (nBAF). The npBAF complex is essential for the self-renewal/proliferative capacity of the multipotent neural stem cells. The nBAF complex along with CREST plays a role regulating the activity of genes essential for dendrite growth
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Purification Method	Antigen Affinity Purified
Isotype	IgG
Clonality	Polyclonal
Alias	SWI/SNF complex subunit SMARCC2 (BRG1-associated factor 170) (BAF170) (SWI/SNF complex 170 kDa subunit) (SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily C member 2), SMARCC2, BAF170

Species	Human
Research Area	Epigenetics and Nuclear Signaling
Target Names	SMARCC2

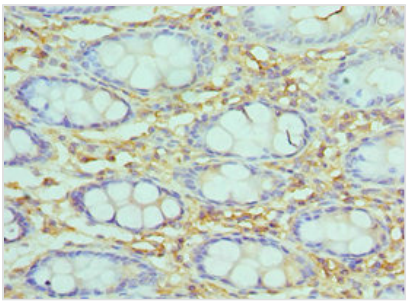
Image



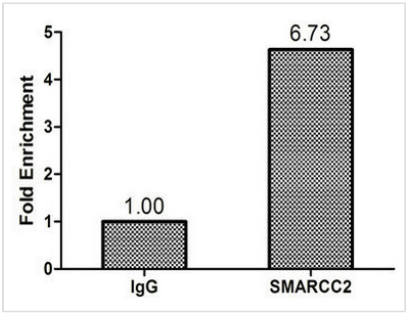
Western blot
All lanes: SWI/SNF complex subunit SMARCC2 antibody at 2µg/ml + Mouse liver tissue
Secondary
Goat polyclonal to rabbit IgG at 1/10000 dilution
Predicted band size: 133, 125, 127 kDa
Observed band size: 133 kDa



Immunohistochemistry of paraffin-embedded human colon cancer using CSB-PA851527ESR2HU at dilution of 1:100



Immunohistochemistry of paraffin-embedded human epityphlon tissue using CSB-PA851527ESR2HU at dilution of 1:100



Chromatin Immunoprecipitation Hela ($1.1*10^6$) were cross-linked with formaldehyde, sonicated, and immunoprecipitated with 4µg anti-SMARCC2 or a control normal rabbit IgG. The resulting ChIP DNA was quantified using real-time PCR with primers (CSB-PP851527HU) against the ESR1 pS2 promoter.