For Research Use Only

## SMARCA4 Recombinant antibody, PBS Only (Detector)

Catalog Number:83310-2-PBS



**Purification Method:** 

CloneNo.:

240172F4

Protein A purification

**Basic Information** 

Catalog Number: GenBank Accession Number:

83310-2-PBS BC150298
Size: GeneID (NCBI):

100ug, Concentration: 1 mg/ml by 6597

Nanodrop; UNIPROT ID:
Source: P51532
Rabbit Full Name:

 Isotype:
 SWI/SNF related, matrix associated,

 IgG
 actin dependent regulator of

 Immunogen Catalog Number:
 chromatin, subfamily a, member 4

AG16256 Calculated MW:

1647 aa, 185 kDa Observed MW: 185 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, FC (Intra), Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity: human, mouse, rat

Product Information

83310-2-PBS targets SMARCA4 as part of a matched antibody pair:

MP00334-1: 83310-1-PBS capture and 83310-2-PBS detection (validated in Cytometric bead array, Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

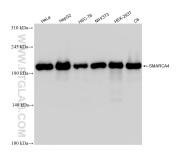
## **Background Information**

SMARCA4, also named as BAF190A, BRG1, SNF2B and SNF2L4, belongs to the SNF2/RAD54 helicase family. SMARCA4 is a transcriptional coactivator cooperating with nuclear hormone receptors to potentiate transcriptional activation. It is a component of the CREST-BRG1 complex, a multiprotein complex that regulates promoter activation by orchestrating a calcium-dependent release of a repressor complex and a recruitment of an activator complex. It is 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.

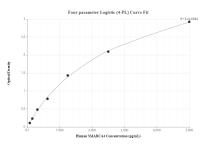
Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

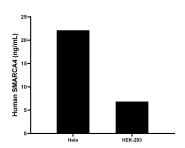
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 83310-2-RR (SMARCA4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83310-2-PBS in a different storage buffer formulation.



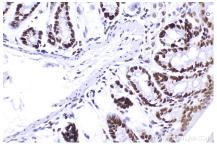
Sandwich ELISA standard curve of MP00334-1, Human SMARCA4 Recombinant Matched Antibody Pair - PBS only. 83310-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag16256. 83310-2-PBS was HRP conjugated as the detection antibody. Range: 78.1-5000 pg/mL.



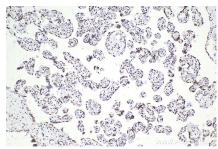
The mean SMARCA4 concentration was determined to be 22.1 ng/mL in Hela cell extract based on a 3.6 mg/mL extract load and 6.9 ng/mL in HEK-293 cell extract based on a 4.6 mg/mL extract load.



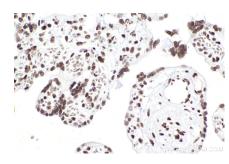
Immunohistochemical analysis of paraffinembedded mouse colon tissue slide using 83310-2-RR (SMARCA4 antibody) at dilution of 1:8000 (under lox lens). Heat mediated antigen retrieval with. This data was developed using the same antibody clone with 83310-2-PBS in a different storage buffer formulation.



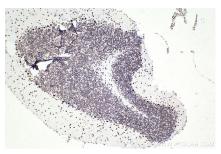
Immunohistochemical analysis of paraffinembedded mouse colon tissue slide using 83310-2-RR (SMARCA4 antibody) at dilution of 1:8000 (under 40x lens). Heat mediated antigen retrieval with. This data was developed using the same antibody clone with 83310-2-PBS in a different storage buffer



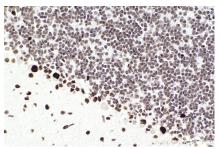
Immunohistochemical analysis of paraffinembedded human placenta tissue slide using 83310-2-RR (SMARCA4 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83310-2-PBS in a different storage buffer formulation.



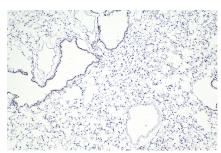
Immunohistochemical analysis of paraffinembedded human placenta tissue slide using 83310-2-RR (SMARCA4 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83310-2-PBS in a different storage buffer

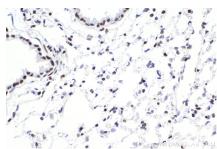


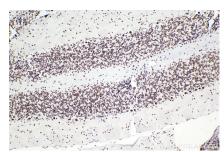
Immunohistochemical analysis of paraffinembedded mouse cerebellum tissue slide using 83310-2-RR (SMARCA4 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83310-2-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded mouse cerebellum tissue slide using 83310-2-RR (SMARCA4 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83310-2-PBS in a different storage buffer formulation.





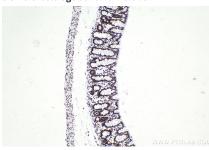


Immunohistochemical analysis of paraffinembedded mouse lung tissue slide using 83310-2-RR (SMARCA4 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83310-2-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded rat cerebellum tissue slide using 83310-2-RR (SMARCA4 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83310-2-PBS in a different storage buffer formulation.

Immunohistochemical analysis of paraffinembedded mouse lung tissue slide using 83310-2-RR (SMARCA4 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83310-2-PBS in a different storage buffer formulation.

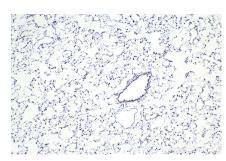


Immunohistochemical analysis of paraffinembedded rat colon tissue slide using 83310-2-RR (SMARCA4 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83310-2-PBS in a different storage buffer formulation.

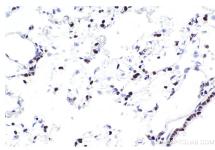
Immunohistochemical analysis of paraffinembedded rat cerebellum tissue slide using 83310-2-RR (SMARCA4 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83310-2-PBS in a different storage buffer



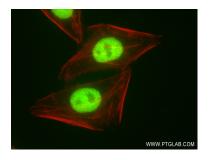
Immunohistochemical analysis of paraffinembedded rat colon tissue slide using 83310-2-RR (SMARCA4 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83310-2-PBS in a different storage buffer formulation.



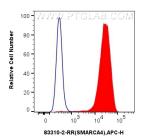
Immunohistochemical analysis of paraffinembedded rat lung tissue slide using 83310-2-RR (SMARCA4 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83310-2-PBS in a different storage buffer formulation.



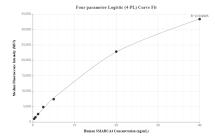
Immunohistochemical analysis of paraffinembedded rat lung tissue slide using 83310-2-RR (SMARCA4 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83310-2-PBS in a different storage buffer formulation.



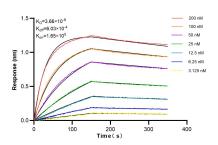
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using SMARCA4 antibody (83310-2-RR, Clone: 240172F4) at dilution of 1:250 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 83310-2-PBS in a different storage buffer formulation.



1x10^6 Jurkat cells were intracellularly stained with 0.25 ug SMARCA4 Recombinant antibody (83310-2-RR, Clone:240172F4) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 83310-2-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00334-1, SMARCA4 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83310-1-PBS. Detection antibody: 83310-2-PBS. Standard: Ag16256. Range: 0.313-40 ng/mL



Biolayer interferometry (BLL) kinetic assays of 83310-2-RR against Human SMARCA4 were performed. The affinity constant is 3.66 nM.