10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-SNF2L Antibody

Catalog # AP96058

Product Information

Application	WB, IHC, FC
Primary Accession	P28370
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Calculated MW	121142

Additional Information

Gene ID	6594
Other Names	SNF2L; SNF2L1; Probable global transcription activator SNF2L1; ATP-dependent helIC, ase SMARCA1; Nucleosome-remodeling factor subunit SNF2L; SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily A member 1
Target/Specificity	Recombinant fusion protein of human SNF2L expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~FC (1/100 - 1/200)
Format	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	SMARCA1 (HGNC:11097)
Synonyms	SNF2L, SNF2L1
Function	[Isoform 1]: ATPase that possesses intrinsic ATP-dependent chromatin-remodeling activity (PubMed:14609955, PubMed:15310751, PubMed:15640247, PubMed:28801535). ATPase activity is substrate-dependent, and is increased when nucleosomes are the substrate, but is also catalytically active when DNA alone is the substrate (PubMed:14609955, PubMed:15310751, PubMed:15640247). Catalytic subunit of ISWI chromatin-remodeling complexes, which form ordered nucleosome arrays on chromatin and facilitate access to DNA during DNA-templated processes such as DNA replication, transcription, and repair (PubMed:14609955, PubMed:15310751, PubMed:15640247, PubMed:28801535). Within the ISWI chromatin-remodeling complexes, slides edge- and center-positioned histone octamers away from their original location on the DNA template (PubMed:28801535). Catalytic activity and histone octamer sliding propensity

is regulated and determined by components of the ISWI chromatin-remodeling complexes (PubMed:28801535). The BAZ1A-, BAZ1B-, BAZ2A- and BAZ2B-containing ISWI chromatin-remodeling complexes regulate the spacing of nucleosomes along the chromatin and have the ability to slide mononucleosomes to the center of a DNA template (PubMed:28801535). The CECR2- and RSF1-containing ISWI chromatin-remodeling complexes do not have the ability to slide mononucleosomes to the center of a DNA template (PubMed:28801535). Within the NURF-1 and CERF-1 ISWI chromatin remodeling complexes, nucleosomes are the preferred substrate for its ATPase activity (PubMed:14609955, PubMed:15640247). Within the NURF-1 ISWI chromatin-remodeling complex, binds to the promoters of En1 and En2 to positively regulate their expression and promote brain development (PubMed:14609955). May promote neurite outgrowth (PubMed:14609955). May be involved in the development of luteal cells (PubMed:16740656). Facilitates nucleosome assembly during DNA replication, ensuring replication fork progression and genomic stability by preventing replication stress and nascent DNA gaps (PubMed:39413208).

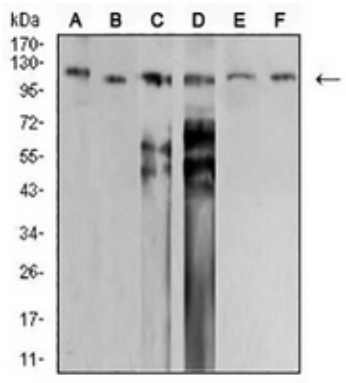
Cellular Location

Nucleus. Chromosome

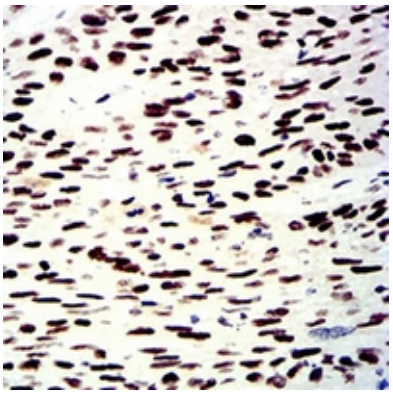
Tissue Location

[Isoform 1]: Expressed in lung, breast, kidney, ovary, skeletal muscle and brain.

Images

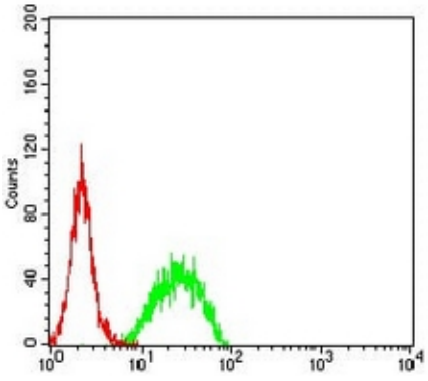


Western blot analysis of SNF2L expression in PANC1 (A), HEK293 (B), SW620 (C), HT29 (D), SHSY5Y (E), SKOV3 (F) whole cell lysates. (Predicted band size: 123 kD; Observed band size: 120 kD)



Immunohistochemical analysis of SNF2L staining in human esophageal cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Flow cytometric analysis of NIH/3T3 cells using Anti-SNF2L Antibody (green) and negative control (red).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.