

### **ARID1A Antibody (C-Term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21703b

# **Specification**

# ARID1A Antibody (C-Term) - Product Information

Application WB,E
Primary Accession O14497
Reactivity Human
Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 242045

# ARID1A Antibody (C-Term) - Additional Information

#### **Gene ID 8289**

#### **Other Names**

AT-rich interactive domain-containing protein 1A, ARID domain-containing protein 1A, B120, BRG1-associated factor 250, BAF250, BRG1-associated factor 250a, BAF250A, Osa homolog 1, hOSA1, SWI-like protein, SWI/SNF complex protein p270, SWI/SNF-related, matrix-associated, actin-dependent regulator of chromatin subfamily F member 1, hELD, ARID1A, BAF250, BAF250A, C1orf4, OSA1, SMARCF1

### Target/Specificity

This ARID1A antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 1717-1750 amino acids from human ARID1A.

#### **Dilution**

WB~~1:2000

E~~Use at an assay dependent concentration.

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

ARID1A Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **ARID1A Antibody (C-Term) - Protein Information**

### Name ARID1A



### Synonyms BAF250, BAF250A, Clorf4, OSA1, SMARCF1

Function Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). Component of SWI/SNF chromatin remodeling complexes that carry out key enzymatic activities, changing chromatin structure by altering DNA-histone contacts within a nucleosome in an ATP-dependent manner. Binds DNA non-specifically. 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 postmitotic 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 postmitotic 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 (By similarity).

### **Cellular Location**

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00355, ECO:0000269|PubMed:11318604, ECO:0000269|PubMed:26614907}

#### **Tissue Location**

Highly expressed in spleen, thymus, prostate, testis, ovary, small intestine, colon, and PBL, and at a much lower level in heart, brain, placenta, lung, liver, skeletal muscle, kidney, and pancreas.

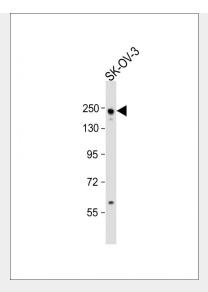
### ARID1A Antibody (C-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### ARID1A Antibody (C-Term) - Images





Anti-ARID1A Antibody (C-Term) at 1:2000 dilution + SK-OV-3 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 242 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# ARID1A Antibody (C-Term) - Background

Involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). Binds DNA non-specifically. Also involved in vitamin Dcoupled 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 (By similarity).

#### ARID1A Antibody (C-Term) - References

Nie Z.,et al.Mol. Cell. Biol. 20:8879-8888(2000). Gregory S.G.,et al.Nature 441:315-321(2006). Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Inoue H.,et al.J. Biol. Chem. 277:41674-41685(2002). Kato H.,et al.J. Biol. Chem. 277:5498-5505(2002).

# **ARID1A Antibody (C-Term) - Citations**

• Satellite glia as a critical component of diabetic neuropathy: Role of lipocalin-2 and pyruvate dehydrogenase kinase-2 axis in the dorsal root ganglion