

**ARID1A Blocking Peptide (C-Term)**  
**Synthetic peptide**  
**Catalog # BP21703b****Specification**

---

**ARID1A Blocking Peptide (C-Term) - Product Information**Primary Accession [O14497](#)**ARID1A Blocking Peptide (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**

The synthetic peptide sequence is selected from aa 1737-1750 of HUMAN ARID1A

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**ARID1A Blocking Peptide (C-Term) - Protein Information****Name** ARID1A**Synonyms** BAF250, BAF250A, C1orf4, 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 Blocking Peptide (C-Term) - Protocols**

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

- [Blocking Peptides](#)

### **ARID1A Blocking Peptide (C-Term) - Images**

### **ARID1A Blocking Peptide (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 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 (By similarity).

### **ARID1A Blocking Peptide (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).