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# Datasheet for ABIN7143052 anti-BAF53A antibody (AA 1-280)

3 Images



## Overview

| Quantity:            | 100 µL   |
|----------------------|--|
| Target:              | BAF53A   |
| Binding Specificity: | AA 1-280   |
| Reactivity:          | Human  |
| Host:                | Rabbit   |
| Clonality:           | Polyclonal   |
| Conjugate:           | This BAF53A antibody is un-conjugated  |
| Application:         | Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Chromatin Immunoprecipitation (ChIP) |

# Product Details

| Immunogen:        | Recombinant Human Actin-like protein 6A protein (1-280AA) |
|-------------------|---|
| Isotype:          | IgG   |
| Cross-Reactivity: | Human, Mouse  |
| Purification:     | Antigen Affinity Purified                                 |

# Target Details

| Target:           | BAF53A   |
|-------------------|--|
| Alternative Name: | ACTL6A (BAF53A Products)   |
| Background:       | Background: Involved in transcriptional activation and repression of select genes by chromatin |

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 1/4 | Product datasheet for ABIN7143052 | 11/30/2023 | Copyright antibodies-online. All rights reserved. remodeling (alteration of DNA-nucleosome topology). Required for maximal ATPase activity of SMARCA4/BRG1/BAF190A and for association of the SMARCA4/BRG1/BAF190A containing remodeling complex BAF with chromatin/nuclear matrix. Belongs to the neural progenitorsspecific chromatin remodeling complex (npBAF complex) and is required for the proliferation of neural progenitors. 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 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). Component of the NuA4 histone acetyltransferase (HAT) complex which is involved in transcriptional activation of select genes principally by acetylation of nucleosomal histones H4 and H2A. This modification may both alter nucleosome - DNA interactions and promote interaction of the modified histones with other proteins which positively regulate transcription. This complex may be required for the activation of transcriptional programs associated with oncogene and protooncogene mediated growth induction, tumor suppressor mediated growth arrest and replicative senescence, apoptosis, and DNA repair. NuA4 may also play a direct role in DNA repair when recruited to sites of DNA damage. 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. Putative core component of the chromatin remodeling INO80 complex which is involved in transcriptional regulation, DNA replication and probably DNA repair. Aliases: 53 kDa BRG1 associated factor A antibody, 53 kDa BRG1-associated factor A antibody, ACL6A\_HUMAN antibody, Actin like 6A antibody, Actin like protein 6A antibody, Actin related protein 4 antibody, Actin related protein antibody, Actin related protein Baf53a antibody, Actinlike protein 6A antibody, Actin-related protein Baf53a antibody, ACTL 6 antibody, ACTL 6A antibody, ACTL6 antibody, ACTL6A antibody, Arp4 antibody, ARPN BETA antibody, ArpNbeta antibody, BAF 53A antibody, BAF complex 53 kDa subunit antibody, BAF53 antibody, BAF53A antibody, BRG1 associated factor antibody, BRG1-associated factor 53A antibody, hArpN beta antibody, INO80 complex subunit K antibody, INO80K antibody, MGC5382 antibody

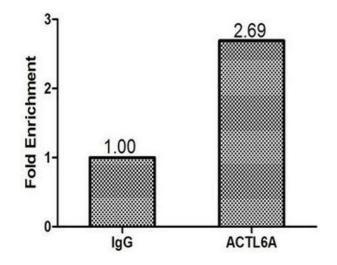
#### UniProt:

096019

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| Target Details      |   |
|---------------------|---|
| Pathways:           | Chromatin Binding, Photoperiodism   |
|                     |   |
| Application Details |   |
| Application Notes:  | Recommended dilution: WB:1:1000-1:5000, IHC:1:20-1:200,                       |
| Restrictions:       | For Research Use only   |
|                     |   |
| Handling            |   |
| Format:             | Liquid  |
| Buffer:             | PBS with 0.02 % sodium azide, 50 % glycerol, pH 7.3.                          |
| Preservative:       | Sodium azide  |
| Precaution of Use:  | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which |
|                     | should be handled by trained staff only.                                      |
| Storage:            | -20 °C,-80 °C   |
| Storage Comment:    | Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.                 |

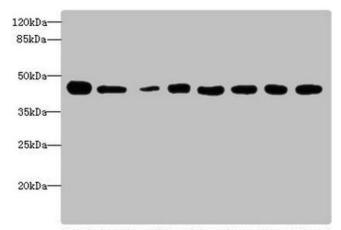
# Images



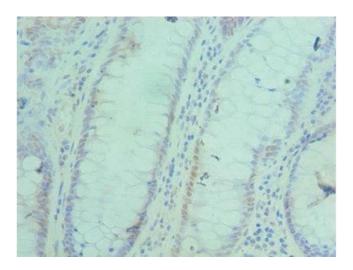
### Immunohistochemistry

**Image 1.** Chromatin Immunoprecipitation MCF-7 (1.1\*10 6) were cross-linked with formaldehyde, sonicated, and immunoprecipitated with  $4 \mu g$  anti-ACTL6A or a control normal rabbit IgG. The resulting ChIP DNA was quantified using real-time PCR with primers against the TFF1 promoter.

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Lane 1 Lane 2 Lane 3 Lane 4 Lane 5 Lane 6 Lane 7 Lane 8



### Western Blotting

**Image 2.** Western blot All lanes: ACTL6A antibody at  $4 \mu$  g/mL Lane 1: Mouse thymus tissue Lane 2: Mouse spleen tissue Lane 3: Mouse heart tissue Lane 4: Jurkats whole cell lysate Lane 5: K562 whole cell lysate Lane 6: Hela whole cell lysate Lane 7: A549 whole cell lysate Lane 8: MCF-7 whole cell lysate Secondary Goat polyclonal to rabbit lgG at 1/10000 dilution Predicted band size: 48, 44 kDa Observed band size: 48 kDa

### Immunohistochemistry

**Image 3.** Immunohistochemistry of paraffin-embedded human colon cancer using ABIN7143052 at dilution of 1:100

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