

**GANP Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP51336****Specification**

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**GANP Antibody - Product Information**

Application	WB, IHC-P, E
Primary Accession	<a href="#">O60318</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	218 KDa

**GANP Antibody - Additional Information****Gene ID** 8888**Other Names**

Germinal-center associated nuclear protein, GANP, 80 kDa MCM3-associated protein, MCM3 acetylating protein, MCM3AP, 231-, MCM3 acetyltransferase, MCM3AP, GANP, KIAA0572, MAP80

**Format**

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**GANP Antibody - Protein Information****Name** MCM3AP**Synonyms** GANP, KIAA0572, MAP80**Function**

[Isoform GANP]: As a component of the TREX-2 complex, involved in the export of mRNAs to the cytoplasm through the nuclear pores (PubMed:<a href="http://www.uniprot.org/citations/20005110" target="\_blank">20005110</a>, PubMed:<a href="http://www.uniprot.org/citations/20384790" target="\_blank">20384790</a>, PubMed:<a href="http://www.uniprot.org/citations/23591820" target="\_blank">23591820</a>, PubMed:<a href="http://www.uniprot.org/citations/22307388" target="\_blank">22307388</a>). Through the acetylation of histones, affects the assembly of nucleosomes at immunoglobulin variable region genes and promotes the recruitment and positioning of transcription complex to favor DNA cytosine deaminase AICDA/AID targeting, hence promoting somatic hypermutations (PubMed:<a href="http://www.uniprot.org/citations/23652018" target="\_blank">23652018</a>).

**Cellular Location**

[Isoform GANP]: Nucleus envelope. Nucleus, nuclear pore complex. Nucleus, nucleoplasm. Chromosome. Note=Predominantly located at the nuclear envelope, facing the nucleus interior

(PubMed:20005110, PubMed:21195085, PubMed:23591820). Localization at the nuclear pore complex requires NUP153, TPR and ALYREF/ALY (PubMed:23591820, PubMed:22307388). Also found associated with chromatin (PubMed:23652018). In B-cells, targeted to the immunoglobulin variable region genes (PubMed:23652018).

#### **Tissue Location**

Widely expressed (PubMed:11024281). Up-regulated in germinal center B-cells in tonsils (at protein level) (PubMed:11024281).

#### **GANP Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **GANP Antibody - Images**

#### **GANP Antibody - Background**

Isoform GANP: Essential for the generation of high- affinity B-cells against T-cell-dependent antigens by affecting somatic hypermutation at the IgV-regions. May have stimulation- dependent DNA primase activity that would generate extra RNA primers in very rapidly proliferating cells and would support clonal expansion of differentiating B-cells (By similarity). Involved in the nuclear export of poly(A)-containing mRNAs by acting as a scaffold for the TREX-2 complex. The TREX-2 complex functions in docking export-competent ribonucleoprotein particles (mRNPs) to the nuclear entrance of the nuclear pore complex (nuclear basket). TREX-2 participates in mRNA export and accurate chromatin positioning in the nucleus by tethering genes to the nuclear periphery.

#### **GANP Antibody - References**

Abe E.,et al.Gene 255:219-227(2000).  
Hattori M.,et al.Nature 405:311-319(2000).  
Nagase T.,et al.DNA Res. 5:31-39(1998).  
Takei Y.,et al.J. Biol. Chem. 273:22177-22180(1998).  
Takei Y.,et al.EMBO Rep. 2:119-123(2001).