

MCM3AP / GANP Antibody (aa1841-1890)
Rabbit Polyclonal Antibody
Catalog # ALS15422**Specification**

MCM3AP / GANP Antibody (aa1841-1890) - Product Information

Application	WB, IHC
Primary Accession	O60318
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	218kDa KDa

MCM3AP / GANP Antibody (aa1841-1890) - Additional Information**Gene ID** 8888**Other Names**

Germinal-center associated nuclear protein, GANP, 80 kDa MCM3-associated protein, MCM3 acetylating protein, MCM3AP, 2.3.1.-, MCM3 acetyltransferase, MCM3AP, GANP, KIAA0572, MAP80

Target/Specificity

GANP Antibody detects endogenous levels of total GANP protein.

Reconstitution & Storage

Store at -20°C for up to one year.

Precautions

MCM3AP / GANP Antibody (aa1841-1890) is for research use only and not for use in diagnostic or therapeutic procedures.

MCM3AP / GANP Antibody (aa1841-1890) - 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:20005110, PubMed:20384790, PubMed:23591820, PubMed:22307388). 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:23652018).

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).

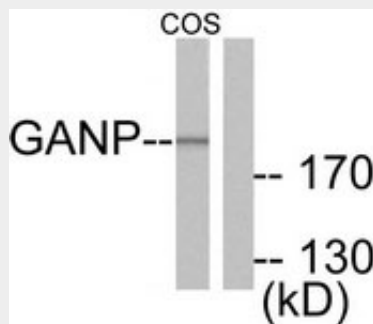
Volume

50 μ l

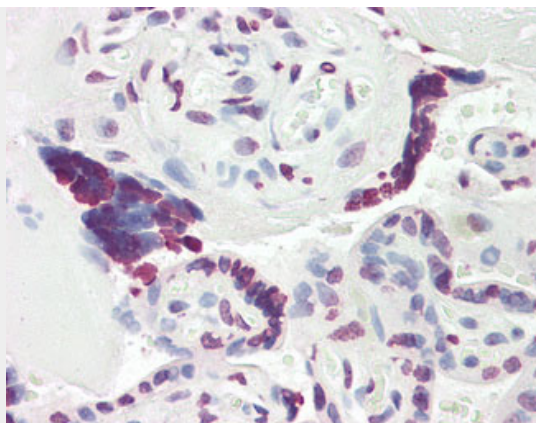
MCM3AP / GANP Antibody (aa1841-1890) - Protocols

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](#)

MCM3AP / GANP Antibody (aa1841-1890) - Images

Western blot of extracts from COS7 cells, using GANP Antibody.



Anti-MCM3AP antibody IHC of human placenta.

MCM3AP / GANP Antibody (aa1841-1890) - 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.

MCM3AP / GANP Antibody (aa1841-1890) - 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).