

### MAGT1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5056A

## **Specification**

## MAGT1 Antibody (N-term) - Product Information

Application WB, FC,E Primary Accession Q9H0U3

Other Accession
Reactivity
Predicted

O9COY5, O5ZJ06
Human, Mouse
Chicken

Predicted
Host
Clonality
Isotype
Antigen Region

Chicken
Rabbit
Polyclonal
Rabbit IgG
44-71

## MAGT1 Antibody (N-term) - Additional Information

#### **Gene ID 84061**

#### **Other Names**

Magnesium transporter protein 1, MagT1, Implantation-associated protein, IAP, MAGT1, IAG2

#### Target/Specificity

This MAGT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 44-71 amino acids from the N-terminal region of human MAGT1.

## **Dilution**

WB~~1:1000 FC~~1:10~50

### **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**

MAGT1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## MAGT1 Antibody (N-term) - Protein Information

Name MAGT1 (HGNC:28880)

Synonyms IAG2



**Function** Accessory component of the STT3B-containing form of the N- oligosaccharyl transferase (OST) complex which catalyzes the transfer of a high mannose oligosaccharide from a lipid-linked oligosaccharide donor to an asparagine residue within an Asn-X-Ser/Thr consensus motif in nascent polypeptide chains (PubMed:31831667). Involved in N- glycosylation of STT3B-dependent substrates (PubMed:31831667). Specifically required for the glycosylation of a subset of acceptor sites that are near cysteine residues; in this function seems to act redundantly with TUSC3. In its oxidized form proposed to form transient mixed disulfides with a glycoprotein substrate to facilitate access of STT3B to the unmodified acceptor site. Has also oxidoreductase- independent functions in the STT3B-containing OST complex possibly involving substrate recognition.

#### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Endoplasmic reticulum. Endoplasmic reticulum membrane; Multi-pass membrane protein

#### **Tissue Location**

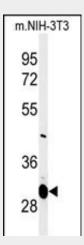
Ubiquitous. Expressed at very low levels in brain, lung and kidney.

## MAGT1 Antibody (N-term) - Protocols

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

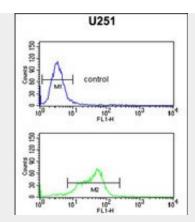
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# MAGT1 Antibody (N-term) - Images



Western blot analysis of MAGT1 Antibody (N-term) (Cat. #AP5056a) in mouse NIH-3T3 cell line lysates (35ug/lane).MAGT1 (arrow) was detected using the purified Pab.





MAGT1 Antibody (N-term) (Cat. #AP5056a) flow cytometric analysis of U251 cells (bottom histogram) compared to a negative control (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# MAGT1 Antibody (N-term) - Background

MAGT1 encodes a magnesium cation transporter protein that localizes to the cell membrane. This protein also associates with N-oligosaccharyl transferase and therefore may have a role in N-glycosylation. Mutations in this gene cause mental retardation X-linked type 95 (MRX95). This gene may have multiple in-frame translation initiation sites, one of which would encode a shorter protein with an N-terminus containing a signal peptide at amino acids 1-29.

## MAGT1 Antibody (N-term) - References

Zhou, H., et al. Proc. Natl. Acad. Sci. U.S.A. 106(37):15750-15755(2009) Molinari, F., et al. Am. J. Hum. Genet. 82(5):1150-1157(2008) Shibatani, T., et al. Biochemistry 44(16):5982-5992(2005)