

# GLD2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5092a

#### **Product Information**

**Application** IHC-P, WB, IF, E

Primary Accession O6PIY7
Other Accession O2HJ44

**Reactivity** Human, Mouse

Predicted Bovine
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 56028
Antigen Region 58-87

### **Additional Information**

**Gene ID** 167153

Other Names Poly(A) RNA polymerase GLD2, hGLD-2, PAP-associated domain-containing

protein 4, Terminal uridylyltransferase 2, TUTase 2, PAPD4, GLD2

**Target/Specificity**This GLD2 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 58-87 amino acids from the N-terminal

region of human GLD2.

**Dilution** IHC-P~~1:100~500 WB~~1:1000 IF~~1:25 E~~Use at an assay dependent

concentration.

**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** GLD2 Antibody (N-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

#### **Protein Information**

Name TENT2 ( <u>HGNC:26776</u>)

**Function** Cytoplasmic poly(A) RNA polymerase that adds successive AMP monomers

to the 3'-end of specific RNAs, forming a poly(A) tail (PubMed: 15070731,

PubMed:31792053). In contrast to the canonical nuclear poly(A) RNA polymerase, it only adds poly(A) to selected cytoplasmic mRNAs (PubMed:15070731). Does not play a role in replication-dependent histone mRNA degradation (PubMed:18172165). Adds a single nucleotide to the 3' end of specific miRNAs, monoadenylation stabilizes and prolongs the activity of some but not all miRNAs (PubMed:23200856, PubMed:31792053).

**Cellular Location** Cytoplasm {ECO:0000250 | UniProtKB:Q91YI6}. Nucleus

{ECO:0000250|UniProtKB:Q91YI6}

**Tissue Location** Expressed in brain. Within brain, it is expressed in cerebellum, hippocampus

and medulla.

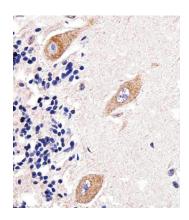
# **Background**

GLD2 is cytoplasmic poly(A) RNA polymerase that adds successive AMP monomers to the 3'-end of specific RNAs, forming a poly(A) tail. In contrast to the canonical nuclear poly(A) RNA polymerase, it only adds poly(A) to selected cytoplasmic mRNAs. GLD2 does not play a role in replication-dependent histone mRNA degradation.

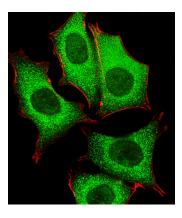
#### References

Mullen, T.E., et al. Genes Dev. 22(1):50-65(2008) Kwak, J.E., et al. Proc. Natl. Acad. Sci. U.S.A. 101(13):4407-4412(2004)

# **Images**

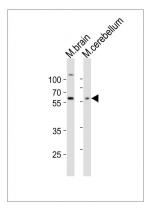


Immunohistochemical analysis of paraffin-embedded H. cerebellum section using GLD2 Antibody (N-term)(Cat#AP5092a). AP5092a was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

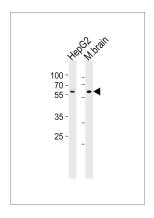


Fluorescent image of MCF-7 cells stained with GLD2 Antibody (N-term)(Cat#AP5092a). AP5092a was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).

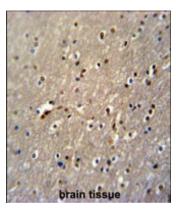
Western blot analysis of lysates from mouse brain, mouse cerebellum tissue lysate (from left to right), using GLD2 Antibody (N-term)(Cat. #AP5092a). AP5092a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at



1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.



Western blot analysis of lysates from HepG2 cell line and mouse brain tissue lysate (from left to right), using GLD2 Antibody (N-term)(Cat. #AP5092a). AP5092a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



GLD2 Antibody (N-term) (Cat. #AP5092a) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the GLD2 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

## **Citations**

• CPEB4 is regulated during cell cycle by ERK2/Cdk1-mediated phosphorylation and its assembly into liquid-like droplets.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.