

#### **Gle1 Antibody**

Catalog # ASC10828

#### **Specification**

## **Gle1 Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

**Application Notes** 

WB, IHC, IF Q53GS7

NP\_001003722, 51317384 Human, Mouse, Rat

Rabbit Polyclonal

IgG

Gle1 antibody can be used for detection of

Gle1 by Western blot at 1 - 2 μg/mL.

Antibody can also be used for

immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20

μg/mL.

#### **Gle1 Antibody - Additional Information**

Gene ID 2733

Target/Specificity

GLE1:

#### **Reconstitution & Storage**

Gle1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

#### **Precautions**

Gle1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **Gle1 Antibody - Protein Information**

## Name GLE1

#### **Synonyms GLE1L**

#### **Function**

Required for the export of mRNAs containing poly(A) tails from the nucleus into the cytoplasm. May be involved in the terminal step of the mRNA transport through the nuclear pore complex (NPC).

## **Cellular Location**

Nucleus. Cytoplasm. Note=Shuttles between the nucleus and the cytoplasm (PubMed:12668658). Shuttling is essential for its mRNA export function (PubMed:12668658).

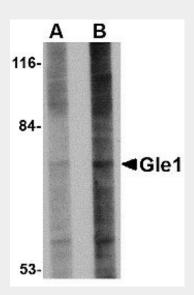


# **Gle1 Antibody - Protocols**

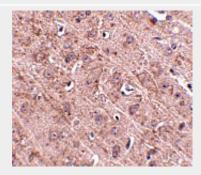
Provided below are standard protocols that you may find useful for product applications.

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

# **Gle1 Antibody - Images**

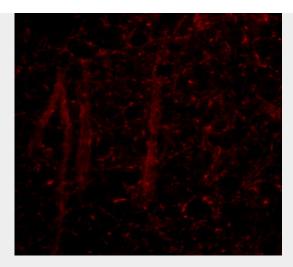


Western blot analysis of Gle1 in 293 cell lysate with Gle1 antibody at (A) 1 and (B) 2  $\mu$ g/mL.



Immunohistochemistry of Gle1 in mouse brain tissue with Gle1 antibody at 2.5 μg/mL.





Immunofluorescence of gle1 in mouse brain tissue with gle1 antibody at 20 µg/mL.

## Gle1 Antibody - Background

Gle1 Antibody: The proper expression of gene products in eukaryotic cells relies on efficient transport of mRNA molecules out of the nucleus. Gle1 is an essential mRNA export factor in both human and yeast cells. It associates with the nuclear pore complex (NPC) through hCG1 and NUP155 in mammalian cells and in conjunction with inositol hexakisphosphate (IP6), stimulates Dbp5, a member of the DEAD-box helicase family, triggering mRNP remodeling and facilitating RNA export from the nucleus. Recent evidence suggests that mutations in Gle1 causing defects in mRNA export can result in human disease. At least three isoforms of Gle1 are known to exist.

#### **Gle1 Antibody - References**

Murphy R and Wente SR. An RNA-export mediator with an essential nuclear export signal. Nature1996; 383:357-60.

Watkins JL, Murphy R, Emtage JL, et al. The human homologue of Saccharomyces cerevisiae Gle1p is required for poly(A)+ RNA export. Proc. Natl. Acad. Sci. USA1998; 95:6779-84.

Kendirgi F, Rexer DJ, Alcazar-Roman AR, et al. Interaction between the shuttling mRNA export factor Gle1 and the nucleoporin hCG1: A conserved mechanism in the export of Hsp70 mRNA. Mol. Biol. Cell2005; 16:4304-15.

Rayala HJ, Kendirgi F, Barry DM, et al. The mRNA export factor human Gle1 interacts with the nuclear pore complex protein Nup155. Mol. Cell. Proteomics2004; 3:145-55.