

Gle1 Antibody
Catalog # ASC10828**Specification**

Gle1 Antibody - Product Information

Application	WB, IHC, IF
Primary Accession	Q53GS7
Other Accession	NP_001003722 , 51317384
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	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

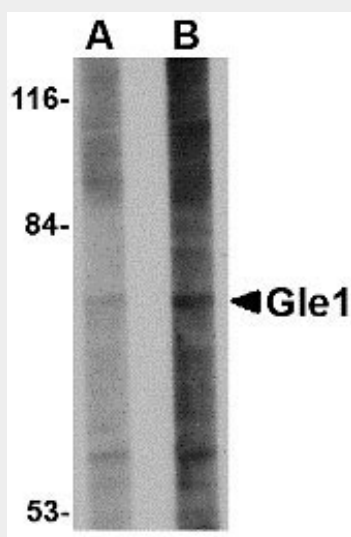
Nucleus. Cytoplasm. Note=Shuttles between the nucleus and the cytoplasm (PubMed:12668658). Shuttling is essential for its mRNA export function (PubMed:12668658).

Gle1 Antibody - Protocols

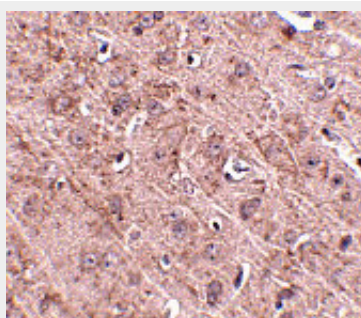
Provided below are standard protocols that you may find useful for product applications.

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

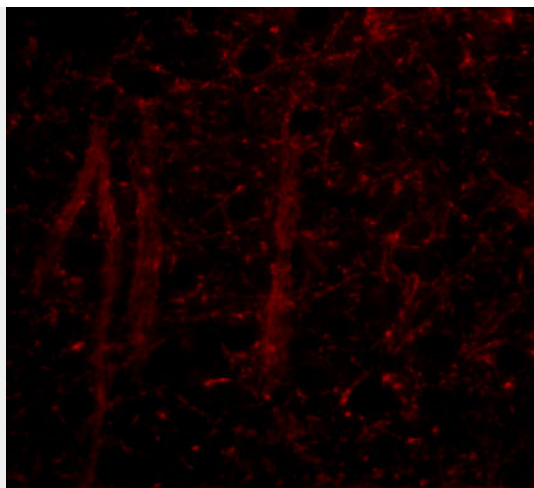
Gle1 Antibody - Images



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



Immunohistochemistry of Gle1 in mouse brain tissue with Gle1 antibody at 2.5 μ g/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. *Nature*1996; 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. USA*1998; 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. Cell*2005; 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. Proteomics*2004; 3:145-55.