

Gle1 Antibody

Catalog # ASC10828

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q53GS7
Other Accession	NP_001003722 , 51317384
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	79836
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Gle1 antibody can be used for detection of Gle1 by Western blot at 1 - 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	2733
Other Names	Nucleoporin GLE1, hGLE1, GLE1-like protein, GLE1, GLE1L
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.

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).

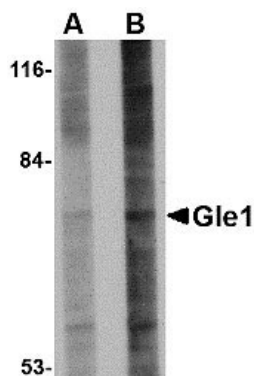
Background

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.

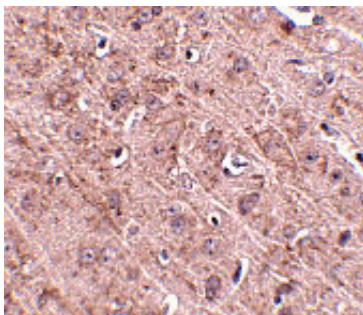
References

- 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.

Images

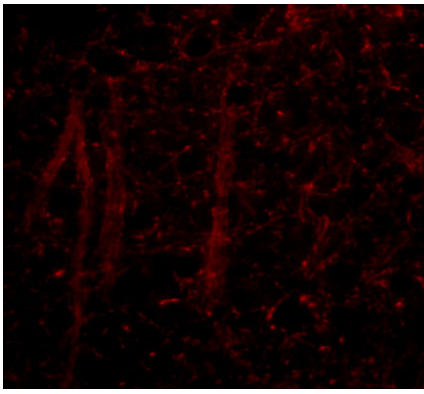


Western blot analysis of Gle1 in 293 cell lysate with Gle1 antibody at (A) 1 and (B) 2 μ g/mL.



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 μ g/mL.



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