

GNPDA1 Antibody (aa100-150)
Rabbit Polyclonal Antibody
Catalog # ALS15293**Specification**

GNPDA1 Antibody (aa100-150) - Product Information

Application	WB, IHC
Primary Accession	P46926
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33kDa KDa

GNPDA1 Antibody (aa100-150) - Additional Information**Gene ID** 10007**Other Names**

Glucosamine-6-phosphate isomerase 1, 3.5.99.6, Glucosamine-6-phosphate deaminase 1, GNPDA 1, GlcN6P deaminase 1, Oscillin, GNPDA1, GNPI, HLN, KIAA0060

Target/Specificity

Human GNPDA1

Reconstitution & Storage

Store at 4°C for short term applications. For long term storage, aliquot and store at -20°C.

Precautions

GNPDA1 Antibody (aa100-150) is for research use only and not for use in diagnostic or therapeutic procedures.

GNPDA1 Antibody (aa100-150) - Protein Information**Name** GNPDA1 {ECO:0000303|PubMed:26887390, ECO:0000312|HGNC:HGNC:4417}**Function**

Catalyzes the reversible conversion of alpha-D-glucosamine 6- phosphate (GlcN-6P) into beta-D-fructose 6-phosphate (Fru-6P) and ammonium ion, a regulatory reaction step in de novo uridine diphosphate-N-acetyl-alpha-D-glucosamine (UDP-GlcNAc) biosynthesis via hexosamine pathway. Deamination is coupled to aldo-keto isomerization mediating the metabolic flux from UDP-GlcNAc toward Fru-6P. At high ammonium level can drive amination and isomerization of Fru-6P toward hexosamines and UDP-GlcNAc synthesis (PubMed:21807125, PubMed:26887390). Has a role in fine tuning the metabolic fluctuations of cytosolic UDP-GlcNAc and their effects on hyaluronan synthesis that occur during tissue remodeling (PubMed:26887390). Seems to trigger calcium oscillations in mammalian eggs. These oscillations serve as the essential trigger for

egg activation and early development of the embryo (By similarity).

Cellular Location

Cytoplasm.

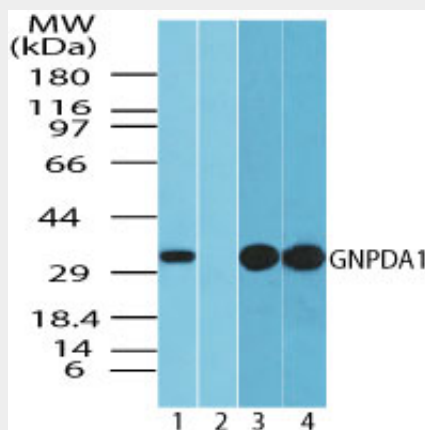
Volume

100 µl

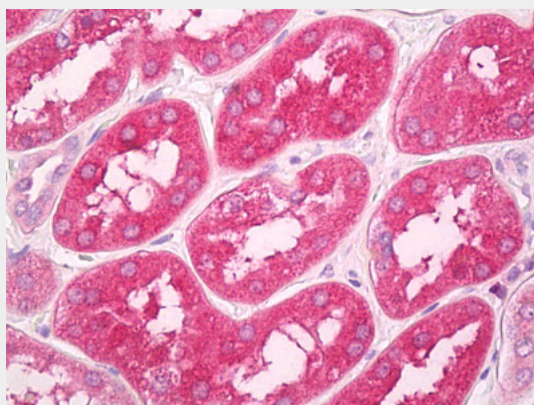
GNPDA1 Antibody (aa100-150) - Protocols

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](#)

GNPDA1 Antibody (aa100-150) - Images

Western blot of GNPDA1 in human spleen lysate in the 1) absence and 2) presence of immunizing...



Anti-GNPDA1 antibody IHC of human kidney.

GNPDA1 Antibody (aa100-150) - Background

Seems to trigger calcium oscillations in mammalian eggs. These oscillations serve as the essential trigger for egg activation and early development of the embryo (By similarity).

GNPDA1 Antibody (aa100-150) - References

Wolosker H.,et al.FASEB J. 12:91-99(1998).
Shevchenko V.,et al.Gene 216:31-38(1998).
Hirata S.,et al.Submitted (OCT-1997) to the EMBL/GenBank/DDBJ databases.
Nomura N.,et al.DNA Res. 1:223-229(1994).
Ota T.,et al.Nat. Genet. 36:40-45(2004).