

# Rabbit Anti-GNPDA2 antibody

## SL13474R

Product Name:	GNPDA2
Chinese Name:	葡萄糖6-磷酸脱氨酶2抗体
Alias:	GlcN6P deaminase 2; Glucosamine 6 phosphate deaminase 2; Glucosamine 6 phosphate isomerase 2; Glucosamine 6 phosphate isomerase SB52; Glucosamine-6-phosphate deaminase 2; Glucosamine-6-phosphate isomerase 2; Glucosamine-6-phosphate isomerase SB52; GNP2; GNPDA 2; Gnpda2; GNPI2 HUMAN; SB52.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	31kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GNPDA2:101-200/276
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	During fertilization in mammals, the sperm activates the egg by causing an increase in the level of free cytoplasmic calcium concentration. This increased calcium concentration induces a characteristic series of oscillations that trigger egg activation and early embryo development. A hamster protein named oscillin is thought to be

involved in this pathway. The enzyme glucosamine-6-phosphate isomerase (GNPI) or deaminase (GNPDA1) and the related protein GNPDA2 are the human homologs of hamster oscillin. GNPDA1 and GNPDA2 catalyze the conversion of GNP to fructose-6-phosphate and ammonia. Both proteins exist as homohexamers and are ubiquitously expressed with highest expression in testis, ovary and heart. Three isoforms of GNPDA2 are expressed due to alternative splicing events.

#### **Subunit:**

Homohexamer (By similarity).

#### **Subcellular Location:**

Cytoplasm.

## Similarity:

Belongs to the glucosamine/galactosamine-6-phosphate isomerase family.

## SWISS:

Q8TDQ7

## Gene ID:

132789

#### Database links:

Entrez Gene: 132789Human

Entrez Gene: 67980Mouse

Omim: 613222Human

SwissProt: Q8TDQ7Human

SwissProt: Q9CRC9Mouse

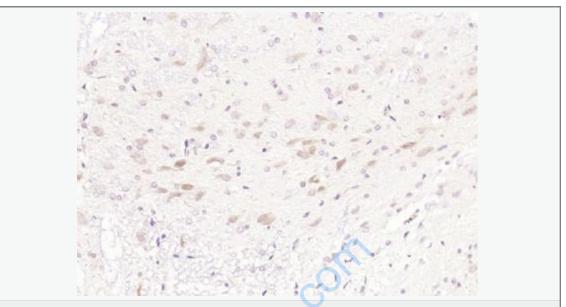
Unigene: 21398Human

Unigene: 33830 Mouse

### **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:	Sample:  Kidney (Mouse) Lysate at 40 ug  Primary: Anti- GNPDA2 (SL13474R) at 1/1000 dilution  Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution  Predicted band size: 31 kD
	Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
	Predicted band size: 31 kD
	Observed band size: 30 kD



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GNPDA2) Polyclonal Antibody, Unconjugated (SL13474R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.