

# Rabbit Anti-G6PDH antibody

# SL6989R

Product Name:	G6PDH
Chinese Name:	己糖6磷酸脱氢酶抗体
Alias:	6 phosphogluconolactonase; 6-phosphogluconolactonase; 6PGL; H6PD; DKFZp686A01246; G6PD H form; G6PDH; G6PE_HUMAN; GDH; H6PD; GDH/6PGL endoplasmic bifunctional protein; Glucose 1 dehydrogenase; Glucose 6 phosphate dehydrogenase salivary; Glucose dehyrogenase; Gpd1; H6pd; Hexose 6 phosphate dehydrogenase; Hexose-6-phosphate dehydrogenase; MGC87643.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Horse, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	85kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human G6PDH:321-420/791
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:	<u>PubMed</u>
Product Detail:	H6PD (hexose-6-phosphate dehydrogenase, GDH/6PGL endoplasmic bifunctional protein) is a 789 amino acid protein encoded by the human gene H6PD. The N-terminal section of H6PD belongs to the glucose-6-phosphate dehydrogenase family, while the

C-terminal section belongs to the glucosamine/galactosamine-6-phosphate isomerase family, 6-phosphogluconolactonase subfamily. H6PD is responsible primarily for the oxidation of glucose-6-phosphate and glucose. It also oxidizes other hexose-6-phosphates. H6PD catalyzes the conversion of glucose 6-phosphate to 6-phosphogluconolactone within the lumen of the endoplasmic reticulum, thereby generating reduced nicotinamide adenine dinucleotide phosphate. Reduced nicotinamide adenine dinucleotide phosphate is a necessary cofactor for the reductase activity of 11J-hydroxysteroid dehydrogenase type 1, which converts hormonally inactive cortisone to active cortisol (in rodents, 11-dehydrocorticosterone to corticosterone).

#### Function:

Oxidizes glucose-6-phosphate and glucose, as well as other hexose-6-phosphates.

#### **Subcellular Location:**

Endoplasmic reticulum lumen. Note=Microsomes, endoplasmic reticulum lumen.

# Tissue Specificity:

Present in most tissues examined, strongest in liver.

#### **DISEASE:**

Defects in H6PD are a cause of cortisone reductase deficiency (CRD) [MIM:604931]. In CRD, activation of cortisone to cortisol does not occur, resulting in adrenocorticotropin-mediated androgen excess and a phenotype resembling polycystic ovary syndrome (PCOS).

#### Similarity:

In the N-terminal section; belongs to the glucose-6-phosphate dehydrogenase family. In the C-terminal section; belongs to the glucosamine/galactosamine-6-phosphate isomerase family. 6-phosphogluconolactonase subfamily.

#### SWISS:

095336

### Gene ID:

9563

#### Database links:

Entrez Gene: 25796Human

Entrez Gene: 9563Human

Entrez Gene: 100198Mouse

Entrez Gene: 66171 Mouse

Entrez Gene: 290636Rat

Entrez Gene: 298655Rat

Omim: 138090Human

Omim: 604951Human

SwissProt: O95336Human

SwissProt: O95479Human

SwissProt: Q8CFX1Mouse

SwissProt: Q9CQ60Mouse

SwissProt: P85971Rat

Unigene: 463511Human

Unigene: 466165Human

Unigene: 22183 Mouse

Unigene: 282284Mouse

Unigene: 402679 Mouse

Unigene: 17292Rat

Unigene: 19855Rat

# **Important Note:**

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