

## Anti-GALK2 Polyclonal Antibody

## Product Details

Ig Type:	IgG
Reactivity:	Rat (predicted: Human, Mouse, Dog, Pig, Cow, Rabbit, Sheep)
Molecular Weight:	Theoretical: 50 kDa.
Purification:	Protein A purified

## Applications

Verified Activity:	Paraformaldehyde-fixed, paraffin embedded (rat kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (GALK2) Polyclonal Antibody, Unconjugated (TMAB-06303) at 1: 200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining.
Application:	IHC-P, IHC-Fr, IF
Recommended	IHC-P: 1:100-500; IHC-Fr: 1:100-500; IF: 1:100-500

## Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

## Antigen Details

Immunogen:	KLH conjugated synthetic peptide: human GALK2/Galactokinase 2
Antigen Species:	Human
Gene ID:	2585
Uniprot ID:	Q01415

## Research Background

GALK2 is important in the first step of the galactose metabolism pathway. GALK1, which belongs to the GHMP kinase family of proteins, is a crucial enzyme for galactose metabolism, specifically converting  $\beta$ -D-galactose to galactose 1-phosphate. Defects in the gene encoding GALK1 can cause galactosemia II, an autosomal recessive disorder characterized by congenital cataracts during infancy, often within the first two weeks of life. In the adult population, galactosemia II can cause presenile cataracts that are secondary to accumulation of galactitol in the lens of the eye. A second gene, GALK2, encodes an enzyme with greater activity against GalNAc than galactose. GALK2 has been implicated in the salvage pathway for the reutilization of free GalNAc derived from the degradation of complex carbohydrates.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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Tel: 781-999-4286 E\_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481