10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GALK2 Rabbit pAb

Catalog # AP97511

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q01415
Other Accession	Q01415
Reactivity	Rat
Predicted	Pig, Human, Mouse, Rabbit, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50378
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GALK2/Galactokinase 2
Epitope Specificity	141-240/458
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the GHMP kinase family. GalK subfamily.
SUBUNIT	Monomer.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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 ?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.

Additional Information

Gene ID	2585
Other Names	GALK2_HUMAN; GALK2; GalNAc kinase; Galactokinase 2; 2.7.1.157; GK2; GALK2_MOUSE; N-acetylgalactosamine kinase
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	GALK2
Synonyms	GK2
Function	Catalyzes the ATP-dependent phosphorylation of N-acetyl-D- galactosamine (GalNAc) to GalNAc 1-phosphate (PubMed:16006554, PubMed:8798585). Exhibits very low galactokinase activity in vitro (PubMed:7542884, PubMed:8798585).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.