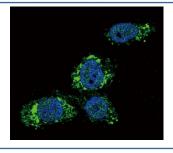


GCK Antibody / Glucokinase (F54202)

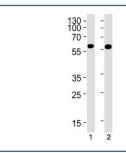
Catalog No.	Formulation	Size
F54202-0.2ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.2 ml
F54202-0.05ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.05 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis in 1X PBS
UniProt	P35557
Localization	Cytoplasmic, nuclear
Applications	Western Blot : 1:500-1:1000 IHC (FFPE) : 1:50-1:100 Immunofluorescence : 1:10-1:50
Limitations	This GCK antibody is available for research use only.

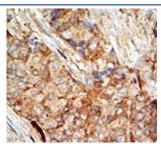


Immunofluorescence testing of human HepG2 cells with GCK antibody (green) and DAPI nuclear counterstain (blue).



Western blot testing of 1) human HepG2 and 2) rat liver lysate with GCK antibody. Predicted molecular weight ~52 kDa.

IHC testing of FFPE human breast carcinoma tissue with GCK antibody.



Description

Hexokinases phosphorylate glucose to produce glucose-6-phosphate, thus committing glucose to the glycolytic pathway. Alternative splicing of the gene for GCK results in three tissue-specific forms of glucokinase, one found in pancreatic islet beta cells and two found in liver. The protein localizes to the outer membrane of mitochondria. In contrast to other forms of hexokinase, this enzyme is not inhibited by its product glucose-6-phosphate but remains active while glucose is abundant. Mutations in the gene have been associated with non-insulin dependent diabetes mellitus (NIDDM), also called maturity onset diabetes of the young, type 2 (MODY2); mutations have also been associated with persistent hyperinsulinemic hypoglycemia of infancy (PHHI).

Application Notes

Optimal dilution of the GCK antibody should be determined by the researcher.

Immunogen

A portion of amino acids 1-30 from the human protein was used as the immunogen for the GCK antibody.

Storage

After reconstitution, the GCK antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.