

## Rabbit anti-Human GCK Polyclonal Antibody | anti-GCK antibody

GCK Antibody (C-term)

| CATALOG # | HOST   | REACTIVITY | APPLICATIONS                              |
|-----------|--------|------------|-------------------------------------------|
| AAA288244 | Rabbit | Human      | Immunohistochemistry, ELISA, Western Blot |

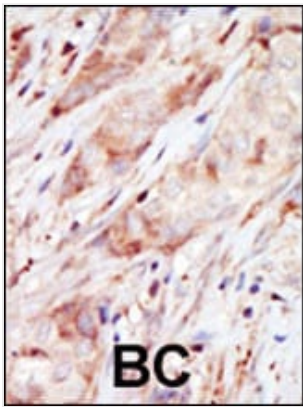
### PRODUCT SYNONYMS

GCK; Polyclonal Antibody; GCK Antibody (C-term); Glucokinase; Hexokinase type IV; HK IV; Hexokinase-4; HK4; Hexokinase-D; anti-GCK antibody

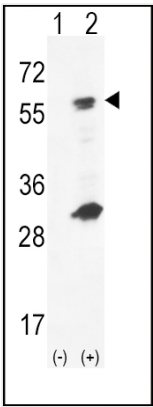
### PRODUCT SPECIFICATIONS

|                                               |                                                                                                                                                                                           |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                          | Rabbit                                                                                                                                                                                    |
| Reactivity                                    | Human                                                                                                                                                                                     |
| Clonality                                     | Polyclonal                                                                                                                                                                                |
| Isotype                                       | Rabbit Ig                                                                                                                                                                                 |
| Specificity                                   | This GCK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 403-433 amino acids from the C-terminal region of human GCK.                        |
| Purity/Purification                           | Purified Rabbit Polyclonal Antibody (Pab)                                                                                                                                                 |
| Form/Format                                   | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS. |
| Concentration                                 | Vial Concentration: 2 (varies by lot)                                                                                                                                                     |
| Sequence Positions                            | 403-433                                                                                                                                                                                   |
| Sequence Length                               | 465                                                                                                                                                                                       |
| Applicable Applications for anti-GCK antibody | IHC (Immunohistochemistry), ELISA, WB (Western Blot)                                                                                                                                      |
| Antigen Type                                  | Synthetic Peptide                                                                                                                                                                         |
| Antigen Source                                | HUMAN                                                                                                                                                                                     |
| Preparation and Storage                       | Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.                                    |

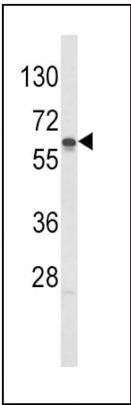
IMAGES



**IHC (Immunohistochemistry)**  
Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



**WB (Western Blot)**  
Western blot analysis of GCK (arrow) using rabbit polyclonal hGCK-S418. 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the GCK gene.



**WB (Western Blot)**  
Western blot analysis of hGCK-S418 in Jurkat cell line lysates (35ug/lane). GCK (arrow) was detected using the purified Pab.

ADDITIONAL INFORMATION

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-GCK antibody | 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). |
| Product Categories/Family for anti-GCK antibody   | Cancer; Cardiovascular; Metabolism; Signal transduction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| References                                        | Gloyn, A.L., et al., Diabetes 52(9):2433-2440 (2003).<br>Pruhova, S., et al., Diabetologia 46(2):291-295 (2003).<br>Rizzo, M.A., et al., J. Biol. Chem. 277(37):34168-34175 (2002).<br>Cao, H., et al., Hum. Mutat. 20(6):478-479 (2002).<br>Barrio, R., et al., J. Clin. Endocrinol. Metab. 87(6):2532-2539 (2002).                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

NCBI AND UNIPROT INFORMATION

|             |         |
|-------------|---------|
| NCBI GI #   | 4503951 |
| NCBI GeneID | 2645    |

|                                  |                                                     |
|----------------------------------|-----------------------------------------------------|
| NCBI Accession #                 | NP_000153.1; NP_277042.1; NP_277043.1               |
| NCBI GenBank Nucleotide #        | NM_000162.3                                         |
| UniProt Accession #              | P35557; Q05810; A4D2J2; A4D2J3                      |
| Molecular Weight                 | 52191                                               |
| NCBI Official Full Name          | glucokinase isoform 1                               |
| NCBI Official Synonym Full Names | glucokinase (hexokinase 4)                          |
| NCBI Official Symbol             | GCK                                                 |
| NCBI Official Synonym Symbols    | GK; GLK; HK4; HHF3; HKIV; HXKP; LGLK; MODY2; FGQTL3 |
| NCBI Protein Information         | glucokinase                                         |
| UniProt Protein Name             | Glucokinase                                         |
| UniProt Gene Name                | <b>GCK</b>                                          |
| UniProt Synonym Gene Names       | HK IV; HK4                                          |
| UniProt Entry Name               | HXK4_HUMAN                                          |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/gck-antibody-immunohistochemistry-western-blot-elisa/288244>