

Rabbit Polyclonal Anti-SGLT2 antibody

Catalog Number: SGLT2-201AP

Lot Number:

General Information

Product	SGLT2 Antibody Affinity Purified
Description	Sodium/glucose cotransporter 2 Antibody
Accession #	Uniprot: P31639 NCBI: NP_003032
Verified Applications	ELISA, IP, WB
Species Cross Reactivity	Human, Monkey
Host	Rabbit
Immunogen	Synthetic peptide taken within amino acid region 580-630 on human SGLT2 protein.
Alternative Nomenclature	OTTHUMP00000163298 antibody, SGLT 2 antibody, SLC5A2 antibody, Sodium glucose cotransporter 2 antibody, Solute carrier family 5 member 2 antibody

Physical Properties

Volume	30 µl
Form	Affinity Purified Immunoglobulins
Immunoglobulin & Concentration	0.65 mg/ml IgG in antibody stabilization buffer
Storage	Store at -20°C for long term storage.

Recommended Dilutions

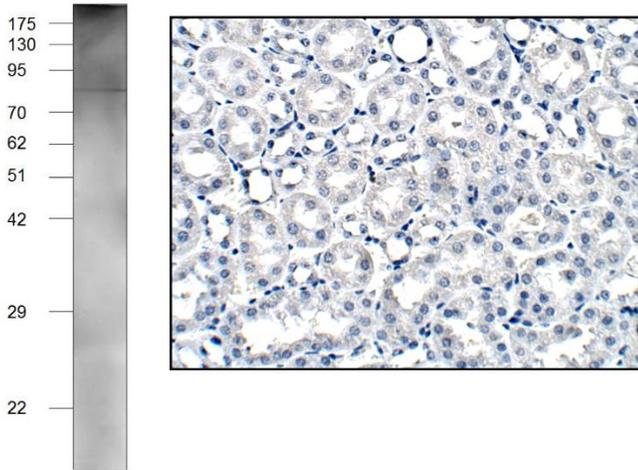
DOT Blot	1:10,000
ELISA	1:10,000
Immunoprecipitation	1:150
Western Blot	1:500

Related Products

Catalog

FITC-Conjugated	SGLT2-201AP
Antigenic Blocking Peptide	SGLT2-FITC
Western Blot Positive Control	P-SGLT2
SGLT1 Antibody	SGLT-101AP & SGLT-112AP

Application Verification:



Mouse Kidney-SGLT2

Primary antibody: SGLT2-201AP; 1:50 dilution in IHC blocking buffer. DAB (brown) substrate. Hematoxylin QS (blue) counterstain.

WB of SGLT2 antibody with HEK293T cells. Apparent MW is 75 kDa. 1:250 antibody dilution in DiluOBuffer.

Dilutions are for reference only. Applications not listed above are not necessarily precluded from working with this antibody. Investigators intending to use an application that has not been verified can request a complimentary sample.

Overview:

Sodium-glucose linked transporters (SGLT) are a family of glucose transporters that contribute to renal glucose reabsorption. The two most common members of SGLT family are members of the SLC5A gene family: SGLT1 and SGLT2. There are five other members in the human protein family SLC5A, which may also be sodium-glucose transporters (1). SGLTs utilize secondary active transport to transport glucose along kidney proximal tubules by sodium ion cotransport with a sodium ion to glucose coupling ratio of 2:1. A Na⁺/K⁺ ATPase pump on the basolateral membrane of the proximal tubules cells utilizes ATP to move 3 Sodium ions outward into the blood, and 2 potassium ions into the cell. The energy from the resulting downhill sodium ion gradient is utilized by SGLTs to transport glucose across the apical membrane. Since sodium and glucose are transported in the same direction, SGLTs are classified as symporters. SGLTs are mainly expressed in intestine and kidney. SGLT2 is the major cotransporter involved in glucose reabsorption in the kidney (2).

FabGennix SGLT and GLUT antibodies have been fully characterized for cross reactivity within the SGLT and GLUT families and also with other cellular proteins. Antibodies against multiple epitopes on the same protein to facilitate studies using interspecies cross reactivity. SGLT2 western blot positive control (PC-SGLT2) is available in read-to-use SDS-PAGE sample buffer. The SGLT2 positive control appears as a diffuse band of 69-72 and co-migrates with rat jejunal sodium-dependent glucose transporter protein on a 10% SDS-PAGE.

References

1. Ensembl release 48: Homo sapiens Ensembl protein family ENSF00000000509
2. Entrez Gene: solute carrier family 5 (sodium/glucose cotransporter).

* For users who may require large amounts of the products listed above, please inquire about bulk material discounts.
This Product is for Research Use Only and is NOT intended for use in humans or clinical diagnosis.