

**SGLT-1 Blocking Peptide**  
**Catalog # PBV10335b****Specification**

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**SGLT-1 Blocking Peptide - Product Information**

Primary Accession	<a href="#">P13866</a>
Gene ID	<b>6523</b>
Calculated MW	<b>73498</b>

**SGLT-1 Blocking Peptide - Additional Information****Gene ID** 6523**Application & Usage**

The peptide is used for blocking the antibody activity of SGLT-1. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30-60 minutes at 37°C.

**Other Names**

Sodium/glucose cotransporter 1, Na(+)/glucose cotransporter 1, High affinity sodium-glucose cotransporter, Solute carrier family 5 member 1, SLC5A1, NAGT, SGLT1

**Target/Specificity**

SGLT-1

**Formulation**

50 µg (0.5 mg/ml) SGLT-1 peptide in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

**Reconstitution & Storage**

-20 °C

**Background Descriptions****Precautions**

SGLT-1 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

**SGLT-1 Blocking Peptide - Protein Information****Name** SLC5A1 {ECO:0000303|PubMed:28974690, ECO:0000312|HGNC:HGNC:11036}**Function**

Electrogenic Na(+)-coupled sugar symporter that actively transports D-glucose or D-galactose at the plasma membrane, with a Na(+) to sugar coupling ratio of 2:1. Transporter activity is driven by a transmembrane Na(+) electrochemical gradient set by the Na(+)/K(+) pump (PubMed:<a

<http://www.uniprot.org/citations/20980548></a>, PubMed:<a href="http://www.uniprot.org/citations/35077764" target="\_blank">http://www.uniprot.org/citations/35077764</a>, PubMed:<a href="http://www.uniprot.org/citations/8563765" target="\_blank">http://www.uniprot.org/citations/8563765</a>, PubMed:<a href="http://www.uniprot.org/citations/34880492" target="\_blank">http://www.uniprot.org/citations/34880492</a>). Has a primary role in the transport of dietary monosaccharides from enterocytes to blood. Responsible for the absorption of D-glucose or D-galactose across the apical brush-border membrane of enterocytes, whereas basolateral exit is provided by GLUT2. Additionally, functions as a D-glucose sensor in enteroendocrine cells, triggering the secretion of the incretins GCG and GIP that control food intake and energy homeostasis (PubMed:<a href="http://www.uniprot.org/citations/8563765" target="\_blank">http://www.uniprot.org/citations/8563765</a>) (By similarity). Together with SGLT2, functions in reabsorption of D-glucose from glomerular filtrate, playing a nonredundant role in the S3 segment of the proximal tubules (By similarity). Transports D-glucose into endometrial epithelial cells, controlling glycogen synthesis and nutritional support for the embryo as well as the decidual transformation of endometrium prior to conception (PubMed:<a href="http://www.uniprot.org/citations/28974690" target="\_blank">http://www.uniprot.org/citations/28974690</a>). Acts as a water channel enabling passive water transport across the plasma membrane in response to the osmotic gradient created upon sugar and Na(+) uptake. Has high water conductivity, comparable to aquaporins, and therefore is expected to play an important role in transepithelial water permeability, especially in the small intestine.

**Cellular Location**

Apical cell membrane; Multi-pass membrane protein

**Tissue Location**

Expressed in intestine (PubMed:2490366). Expressed in endometrial cells (PubMed:28974690).

**SGLT-1 Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**SGLT-1 Blocking Peptide - Images**