

#5042 Store at -20°C

# SGLT1 Antibody



100 µl  
(10 western blots)

**Orders** ■ 877-616-CELL (2355)  
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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #6523  
Swiss-Prot Acc. #P13866

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, R	61 kDa	Rabbit**

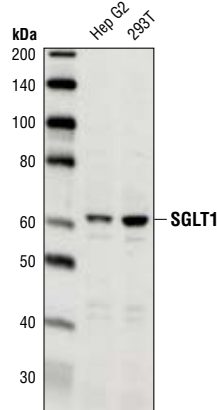
**Background:** Sodium/glucose cotransporter 1 (SGLT1) is an active glucose transporter, which utilizes sodium gradients to transport glucose into cells independent of extracellular glucose concentration. SGLT1 is an essential glucose active transport protein that helps maintain high intracellular glucose levels (1). Expression of SGLT1 is mainly seen in intestinal and kidney epithelial cells, although a recent study also characterized SGLT1 expression in cardiac myocytes (2). Abnormal SGLT1 expression may be associated with cases of type 2 diabetes mellitus and myocardial ischaemia (2). Mutation of the corresponding SGLT1 gene can result in congenital glucose/galactose malabsorption, which can lead to neonatal diarrhea and subsequent death if left untreated (3). A recent study of the role of EGFR in cancer cell survival indicates that EGFR can prevent autophagic cell death independent of EGFR kinase activity because the receptor interacts with and stabilizes SGLT1 to maintain basal intracellular glucose levels (4).

**Specificity/Sensitivity:** SGLT1 Antibody detects endogenous levels of total SGLT1 protein.

**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly247 of human SGLT1 protein. Antibodies were purified by protein A and peptide affinity chromatography.

### Background References:

- (1) Wright, E.M. et al. (1994) *J Exp Biol* 196, 197-212.
- (2) Banerjee, S.K. et al. (2009) *Cardiovasc Res* 84, 111-8.
- (3) Martin, M.G. et al. (1996) *Nat Genet* 12, 216-20.
- (4) Weihua, Z. et al. (2008) *Cancer Cell* 13, 385-93.



Western blot analysis of extracts from Hep G2 and 293T cells using SGLT1 Antibody.

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

\*Species cross-reactivity is determined by western blot.

\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.

### Recommended Antibody Dilutions:

Western blotting 1:1000

For application specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).

Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.

**IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.**

**Applications Key:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide  
**Species Cross-Reactivity Key:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine  
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.