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SLC2A8 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22138c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q9NY64
Other Accession	P58354
Reactivity	Human, Rat, Mouse
Predicted	Bovine
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB55905
Calculated MW	50819

Additional Information

Gene ID	29988
Other Names	Solute carrier family 2, facilitated glucose transporter member 8, Glucose transporter type 8, GLUT-8, Glucose transporter type X1, SLC2A8, GLUT8, GLUTX1
Target/Specificity	This SLC2A8 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 260-292 amino acids from the Central region of human SLC2A8.
Dilution	WB~~1:2000 IHC-P~~1:100~500 FC~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SLC2A8 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SLC2A8 (HGNC:13812)
Function	Insulin-regulated facilitative hexose transporter that mediates the transport

	of glucose and fructose (By similarity). Facilitates hepatic influx of dietary trehalose, which in turn inhibits glucose and fructose influx triggering a starvation signal and hepatic autophagy through activation of AMPK and ULK1 (PubMed:27922102). Also able to mediate the transport of dehydroascorbate.
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:Q9JJZ1}; Multi-pass membrane protein. Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:Q9JJZ1}; Multi-pass membrane protein. Note=Principally intracellular. May move between intracellular vesicles and the plasma membrane. The dileucine internalization motif is critical for intracellular sequestration {ECO:0000250|UniProtKB:Q9JJZ1}
Tissue Location	Highly expressed in testis, but not in testicular carcinoma. Lower amounts present in most other tissues

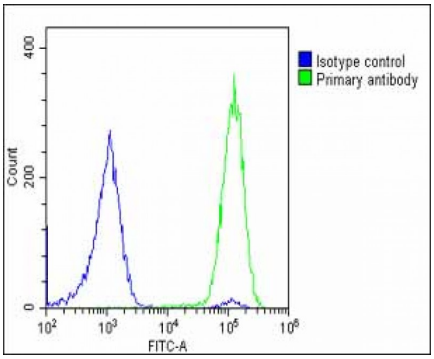
Background

Insulin-regulated facilitative glucose transporter. Binds cytochalasin B in a glucose-inhibitable manner. Seems to be a dual-specific sugar transporter as it is inhibitable by fructose (By similarity).

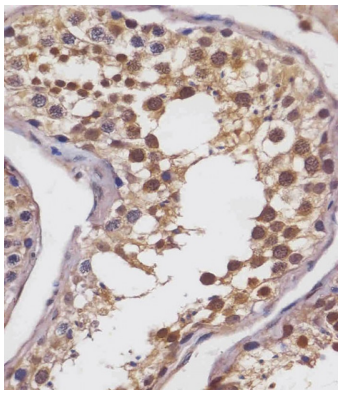
References

Doege H.,et al.J. Biol. Chem. 275:16275-16280(2000).
Ibberson M.R.,et al.J. Biol. Chem. 275:4607-4612(2000).
Humphray S.J.,et al.Nature 429:369-374(2004).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Burkard T.R.,et al.BMC Syst. Biol. 5:17-17(2011).

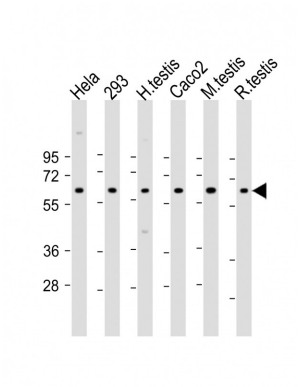
Images



Overlay histogram showing U-2 OS cells stained with AP22138c(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22138c, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OE188374) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



AP22138c staining SLC2A8 in human testis tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



All lanes : Anti-SLC2A8 Antibody (Center) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: 293 whole cell lysate Lane 3: human testis lysate Lane 4: Caco2 whole cell lysate Lane 5: mouse testis lysate Lane 6: rat testis lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 51 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.