GLUT1 Recombinant Rabbit Monoclonal Antibody (SA0377)

Product Details	
Size	100 µL
Species Reactivity	Human, Mouse, Rat
Published Species	Human, Mouse
Host/Isotype	Rabbit / IgG
Class	Recombinant Monoclonal
Type	Antibody
Clone	SA0377
Conjugate	Unconjugated
Immunogen	Synthetic peptide within Human GLUT1 aa 443-492
Form	Liquid
Concentration	1 mg/mL
Purification	Protein A
Storage buffer	TBS, pH 7.4, with 40% Glycerol, 0.05% BSA
Contains	0.05% sodium azide
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_2809254

Applications	Tested Dilution	Publications
Western Blot (WB)	1:500-1:1,000	-
Immunohistochemistry (IHC)	1:50-1:200	1 Publication
Immunocytochemistry (ICC/IF)	1:50-1:200	-
Flow Cytometry (Flow)	1:50-1:100	1 Publication

Product Specific Information

Recombinant rabbit monoclonal antibodies are produced using in vitro expression systems. The expression systems are developed by cloning in the specific antibody DNA sequences from immunoreactive rabbits. Then, individual clones are screened to select the best candidates for production. The advantages of using recombinant rabbit monoclonal antibodies include: better specificity and sensitivity, lot-to-lot consistency, animal origin-free formulations, and broader immunoreactivity to diverse targets due to larger rabbit immune repertoire.

Advanced Verification Data

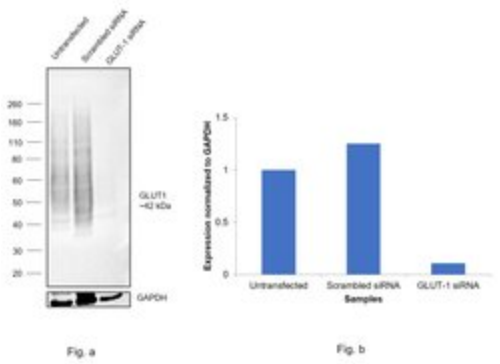
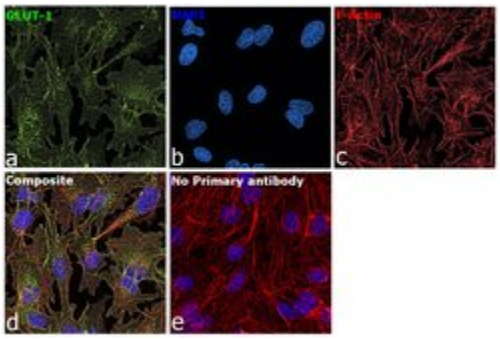


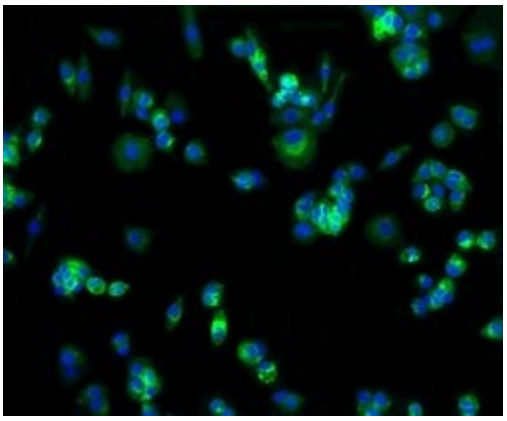
Fig. a Fig. b

GLUT1 Antibody (MA5-31960)
Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. MCF7 cells were transfected with GLUT1 siRNA and decrease in signal intensity was observed in Western Blot application using Anti-GLUT1 Recombinant Rabbit Monoclonal Antibody (SA0377) (Product # MA5-31960). GLUT-1 shows a streak like pattern in cell lines as seen in all the 3 lanes. The siRNA Lane shows almost 90% loss of streak like signal. Knockdown validation info.

Product Images For GLUT1 Recombinant Rabbit Monoclonal Antibody (SA0377)



GLUT1 Antibody (MA5-31960) in ICC/IF
Immunofluorescence analysis of GLUT1 was performed using 70% confluent log phase Hep G2 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 2% BSA for 45 minutes at room temperature. The cells were labeled with GLUT1 Recombinant Rabbit Monoclonal Antibody (SA0377) (Product # MA5-31960) at 1: 100 dilution in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Donkey anti-Rabbit IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488 (Product # A32790), 1:2000 dilution, for 45 minutes at room temperature (Panel a: Blue). Nuclei (Panel b:Green) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: Red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing Plasma membrane and cytoplasm localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.



GLUT1 Antibody (MA5-31960) in ICC/IF
Immunocytochemical analysis of GLUT1 in MCF-7 cells using a GLUT1 Monoclonal antibody (Product # MA5-31960) as seen in green. The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100 /PBS.

View more figures on thermofisher.com

2 References

Immunohistochemistry (1)

Cell reports

Metabolic Deregulation of the Blood-Outer Retinal Barrier in Retinitis Pigmentosa.

"MA5-31960 was used in Immunohistochemistry-immunofluorescence to provide evidence that contact between externalized phosphatidylserine (PS) on OS tips and apical RPE receptors activates Akt, linking phagocytosis with glucose transport to photoreceptors for new OS synthesis."

Authors: Wang W,Kini A,Wang Y,Liu T,Chen Y,Vukmanic E,Emery D,Liu Y,Lu X,Jin L,Lee SJ,Scott P,Liu X,Dean K,Lu Q,Fortuny E,James R,Kaplan HJ,Du J,Dean DC

Species
Mouse

Dilution
1:200

Year
2019

Flow Cytometry (1)

Scientific reports

The proteomic analysis of breast cell line exosomes reveals disease patterns and potential biomarkers.

"MA5-31960 was used in Flow cytometry/Cell sorting to demonstrate that exosomes are a rich source of breast cancer-related proteins and surface biomarkers that may be used for disease diagnosis and prognosis."

Authors: Risha Y,Minic Z,Ghobadloo SM,Berezovski MV

Species
Human

Dilution
Not Cited

Year
2020