

Rabbit Anti-Glut1 [GLUT1/3132R]: RM0063, RM0063RTU7

Intended Use: For Research Use Only

Description: Glucose transporters are integral membrane glycoproteins involved in transporting glucose into most cells. There are many types of glucose transport carrier proteins, designated as Glut-1 to Glut-12. Glut-1, also known as SCL2A1, is a major glucose transporter in the mammalian blood-brain barrier. It is expressed in high density on the membranes of human erythrocytes and the brain capillaries that comprise the blood-brain barrier. Glut-1 is expressed at variable levels in many human tissues. Overexpression of Glut-1 has been linked to tumor progression or poor survival of patients with carcinomas of the colon, breast, cervical, lung, bladder and mesothelioma. Glut-1 is a sensitive and specific marker for the differentiation of malignant mesothelioma (positive) from reactive mesothelium (negative).

Specifications:

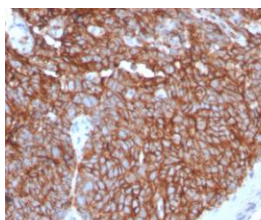
Clone: GLUT1/3132R
 Source: Rabbit
 Isotype: IgG
 Reactivity: Human
 Immunogen: Recombinant fragment of human GLUT1 protein around aa 203-305
 Localization: Membrane
 Formulation: Antibody in PBS pH 7.4, containing BSA and ≤ 0.09% sodium azide (NaN₃)
 Storage: Store at 2°- 8°C.
 Applications: IHC, ELISA, Flow Cyt.
 Package:

Description	Catalog No.	Size
Glut1 Concentrated	RM0063	1 ml
Glut1 Prediluted	RM0063RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Human colon carcinoma, mesothelioma, placenta
 Concentrated Dilution: 50-200
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human tongue tissue stained with anti-Glut1 using DAB

References:

1. Metabolic reprogramming is required for antibody production that is suppressed in anergic but exaggerated in chronically BAFF-exposed B cells. Caro-Maldonado A, et al. J Immunol 192:3626-36, 2014.
2. Metabolic reprogramming towards aerobic glycolysis correlates with greater proliferative ability and resistance to metabolic inhibition in CD8 versus CD4 T cells. Cao Y, et al. PLoS One 9:e104104, 2014.
3. Multiple Metabolic Alterations Exist in Mutant PI3K Cancers, but Only Glucose Is Essential as a Nutrient Source. Foster R, et al. PLoS One 7:e45061, 2012.