

SIc37A2 Antibody

Catalog # ASC11086

Specification

SIc37A2 Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

Application Notes

WB, IHC, IF Q8TED4

NP_938018, 38093649 Human, Mouse, Rat

Rabbit Polyclonal

IgG

Slc37A2 antibody can be used for detection of Slc37A2 by Western blot at 1 µg/mL.

Antibody can also be used for

immunohistochemistry starting at 5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Slc37A2 Antibody - Additional Information

Gene ID **219855**

Target/Specificity

SLC37A2;

Reconstitution & Storage

Slc37A2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

Slc37A2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Slc37A2 Antibody - Protein Information

Name SLC37A2 (<u>HGNC:20644</u>)

Function

Inorganic phosphate and glucose-6-phosphate antiporter. May transport cytoplasmic glucose-6-phosphate into the lumen of the endoplasmic reticulum and translocate inorganic phosphate into the opposite direction. Independent of a lumenal glucose-6-phosphatase. May not play a role in homeostatic regulation of blood glucose levels.

Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein

Tissue Location

Detected in intestine and pancreas. Lower expression is also detected in liver and kidney

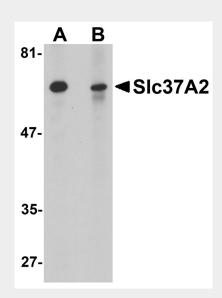


SIc37A2 Antibody - Protocols

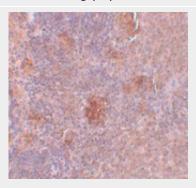
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Slc37A2 Antibody - Images

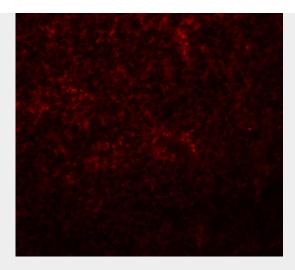


Western blot analysis of Slc37A2 in mouse spleen tissue lysate with Slc37A2 antibody at 1 μ g/mL in the (A) absence and (B) presence of blocking peptide.



Immunohistochemistry of Slc37A2 in rat spleen tissue with Slc37A2 antibody at 5 μg/mL.





Immunofluorescence of Slc37A2 in rat spleen tissue with Slc37A2 antibody at 20 μ g/mL.

Slc37A2 Antibody - Background

Slc37A2 Antibody: The Slc37 gene family consists of four members which have 10-12 predicted transmembrane domains and belong to the sugar-phosphate transporter superfamily. Recent experiments have demonstrated that Slc37A2 is a macrophage-specific gene selectively expressed in obese white adipose tissue. Its transcript is also expressed in spleen and thymus and the cell lines RAW264.7 and THP-1. Compared to wild-type mice, Slc37A2 mRNA is expressed at nine-fold higher levels in abdominal epididymal fat deposits of ob/ob mice, suggesting that it may be required to limit the contribution of macrophages to the inflammatory state present in obesity. Slc37A2 protein is post-translationally modified with the addition of N-linked glycans and migrates as a heterogeneous species of 50-75kDa.

SIc37A2 Antibody - References

Bartolini L and Antonarakis SE. The human sugar-phosphate/phosphate exchanger family SLC37. Eur. J. Physiol.2004; 447-780-3.

Kim JY, Tillison K, Zhou S, et al. The major facilitator superfamily member Slc37a2 is a novel macrophage-specific gene selectively expressed in obese white adipose tissue. Am. J. Physiol. Endocrinol. Metab.2007; 293:E110-20.