

# SLC37A2 (E-13): sc-169337

## BACKGROUND

SLC37A2 (solute carrier family 37 (glycerol-3-phosphate transporter), member 2) is a 501 amino acid multi-pass membrane protein belonging to the major facilitator superfamily and SLC37A family (also known as SLC37A sugar transporter family). Members of the SLC37A family (including SLC37A1, SLC37A3 and SLC37A4) function as transmembrane sugar transporters. SLC37A2 is up-regulated by cAMP in macrophages and may play a role in the metabolism of macrophages present in white adipose tissue (WAT) during obesity. Localizing to membrane, SLC37A2 is highly expressed in bone marrow derived macrophages, with weak expression in spleen, and exists as two alternatively spliced isoforms.

## REFERENCES

1. Bartoloni, L. and Antonarakis, S.E. 2004. The human sugar-phosphate/phosphate exchanger family SLC37. *Pflugers Arch.* 447: 780-783.
2. Yue, Y., et al. 2005. *De novo* t(7;10)(q33;q23) translocation and closely juxtaposed microdeletion in a patient with macrocephaly and developmental delay. *Hum. Genet.* 117: 1-8.
3. Shen, G., et al. 2005. Comparison of (-)-epigallocatechin-3-gallate elicited liver and small intestine gene expression profiles between C57BL/6J mice and C57BL/6J/Nrf2<sup>-/-</sup> mice. *Pharm. Res.* 22: 1805-1820.
4. Shen, G., et al. 2006. Modulation of nuclear factor E2-related factor 2-mediated gene expression in mice liver and small intestine by cancer chemopreventive agent curcumin. *Mol. Cancer Ther.* 5: 39-51.
5. Kim, J.Y., et al. 2007. The major facilitator superfamily member Slc37a2 is a novel macrophage specific gene selectively expressed in obese white adipose tissue. *Am. J. Physiol. Endocrinol. Metab.* 293: E110-E120.

## CHROMOSOMAL LOCATION

Genetic locus: SLC37A2 (human) mapping to 11q24.2; Slc37a2 (mouse) mapping to 9 A4.

## SOURCE

SLC37A2 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SLC37A2 of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-169337 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

SLC37A2 (E-13) is recommended for detection of SLC37A2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with SLC37A1.

SLC37A2 (E-13) is also recommended for detection of SLC37A2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for SLC37A2 siRNA (h): sc-96957, SLC37A2 siRNA (m): sc-153547, SLC37A2 shRNA Plasmid (h): sc-96957-SH, SLC37A2 shRNA Plasmid (m): sc-153547-SH, SLC37A2 shRNA (h) Lentiviral Particles: sc-96957-V and SLC37A2 shRNA (m) Lentiviral Particles: sc-153547-V.

Molecular Weight of SLC37A2 isoform 1: 55 kDa.

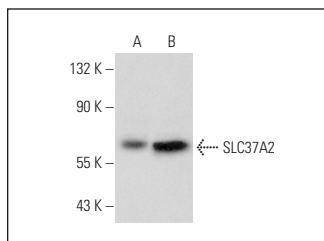
Molecular Weight of SLC37A2 isoform 2: 56 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or A2058 whole cell lysate: sc-364178.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



SLC37A2 (E-13): sc-169337. Western blot analysis of SLC37A2 expression in Hep G2 (A) and A2058 (B) whole cell lysates.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.