

SIDT2 Antibody

Catalog # ASC11591

Specification

SIDT2 Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Calculated MW

Calculated MW Application Notes WB, E Q8NBJ9

NP_001035545, 94721340 Human, Mouse, Rat

Rabbit Polyclonal

IgG

Predicted: 92 kDa KDa

SIDT2 antibody can be used for detection of SIDT2 by Western blot at 0.5 - 1 μ g/mL.

SIDT2 Antibody - Additional Information

Gene ID 51092

Target/Specificity

SIDT2; Multiple isoforms of SIDT2 are known to exist; this antibody is predicted to not cross-react with other members of the SID1 transmembrane family.

Reconstitution & Storage

SIDT2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

SIDT2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SIDT2 Antibody - Protein Information

Name SIDT2

Function

Mediates the translocation of RNA and DNA across the lysosomal membrane during RNA and DNA autophagy (RDA), a process in which RNA or DNA is directly imported into lysosomes in an ATP-dependent manner, and degraded (PubMed:27046251, PubMed:27846365). Involved in the uptake of single-stranded oligonucleotides by living cells, a process called gymnosis (PubMed:28277980). In vitro, mediates the uptake of linear DNA more efficiently than that of circular DNA, but exhibits similar uptake efficacy toward RNA and DNA. Binds long double-stranded RNA (dsRNA) (500 - 700 base pairs), but not dsRNA shorter than 100 bp (By similarity).

Cellular Location

Lysosome membrane; Multi-pass membrane protein. Cell membrane. Note=Mainly localizes to lysosomes and only partly to the plasma membrane (PubMed:28277980). Lysosomal localization is



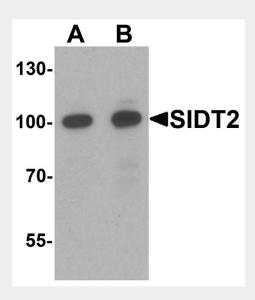
required for SIDT2-mediated intracellular degradation of endogenous RNA (By similarity). {ECO:0000250|UniProtKB:Q8CIF6, ECO:0000269|PubMed:28277980}

SIDT2 Antibody - Protocols

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

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

SIDT2 Antibody - Images



Western blot analysis of SIDT2 in mouse brain tissue lysate with SIDT2 antibody at (A) 0.5 and (B) $1 \mu g/mL$.

SIDT2 Antibody - Background

SIDT2 Antibody: The SID1 transmembrane family member (SIDT2) is a highly glycosylated, multipass transmembrane protein that localizes to the lysosomal membrane. SIDT2 is highly expressed in liver, brain and kidney, with no or little expression in skeletal muscles, heart or other tissues. Little is known of the function of SIDT2.

SIDT2 Antibody - References

Jialin G, Xuefan G, and Huiwen Z. SID1 transmembrane family, member 2 (Sidt2): a novel lysosomal membrane protein. Biochem. Biophys. Res. Commun. 2010; 402:588-94.