

SIDT2 Antibody

Catalog # ASC11591

Product Information

Application	WB, E
Primary Accession	Q8NBJ9
Other Accession	NP_001035545 , 94721340
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	94454
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	SIDT2 antibody can be used for detection of SIDT2 by Western blot at 0.5 - 1 μ g/mL.

Additional Information

Gene ID	51092
Other Names	SID1 transmembrane family member 2, SIDT2
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.

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}

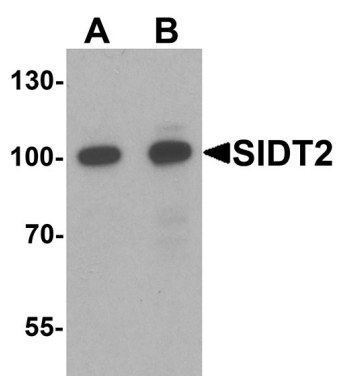
Background

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.

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.

Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.