

Anti-Sacsin Picoband Antibody

Catalog # ABO12855

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9NZJ4
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Sacsin detection. Tested with WB, IHC-P, Direct ELISA in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	26278
Other Names	Sacsin, Dnaj homolog subfamily C member 29, DNAJC29, SACS, KIAA0730
Calculated MW	521126
Application Details	Western blot, 0.1-0.5 µg/ml Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml Direct ELISA, 0.1-0.5 µg/ml
Subcellular Localization	Cytoplasm.
Tissue Specificity	Highly expressed in the central nervous system. Also found in skeletal muscle and at low levels in pancreas.
Source	Eukaryota
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	E. coli-derived human Sacsin recombinant protein (Position: E3709-L3909).
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C; for one year. After reconstitution, at 4 °C; for one month. It can also be aliquotted and stored frozen at -20 °C; for a longer time. Avoid repeated freezing and thawing.

Protein Information

Name	SACS
Synonyms	DNAJC29 {ECO:0000303 PubMed:18663603}, K
Function	Co-chaperone which acts as a regulator of the Hsp70 chaperone machinery and may be involved in the processing of other ataxia-linked proteins.
Cellular Location	Cytoplasm. Note=Predominantly cytoplasmic, a small portion is present in the nucleus and also shows a partial mitochondrial overlap with the mitochondrial marker Hsp60
Tissue Location	Highly expressed in the central nervous system. Also found in skeletal muscle and at low levels in pancreas

Background

Sacsin also known as DnaJ homolog subfamily C member 29 (DNAJC29) is a protein that in humans is encoded by the SACS gene. This gene consists of nine exons including a gigantic exon spanning more than 12.8k bp. It encodes the sacsins protein, which includes a UBQ region at the N-terminus, a HEPN domain at the C-terminus and a DnaJ region upstream of the HEPN domain. This modular protein is essential for normal mitochondrial network organization. The gene is highly expressed in the central nervous system, also found in skin, skeletal muscles and at low levels in the pancreas. Mutations in this gene result in autosomal recessive spastic ataxia of Charlevoix-Saguenay (ARSACS), a neurodegenerative disorder characterized by early-onset cerebellar ataxia with spasticity and peripheral neuropathy.

Images

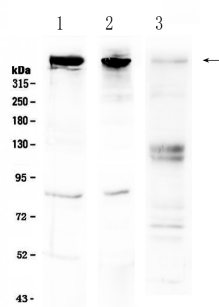
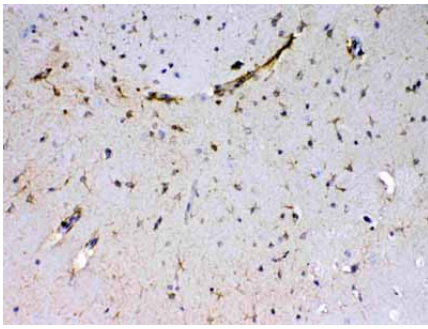


Figure 1. Western blot analysis of Sacsins using anti-Sacsins antibody (ABO12855). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: mouse brain tissue lysates, Lane 3: human Hela cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Sacsins antigen affinity purified polyclonal antibody (Catalog # ABO12855) at 0.5 μ g/mL overnight at 4 $^{\circ}$ C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Sacsins at approximately 52KD. The expected band size for Sacsins is at 521KD.

Figure 2. IHC analysis of Sacsins using anti-Sacsins antibody (ABO12855). Sacsins was detected in paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was



then incubated with 1 μ g/ml rabbit anti-Sacsin Antibody (ABO12855) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

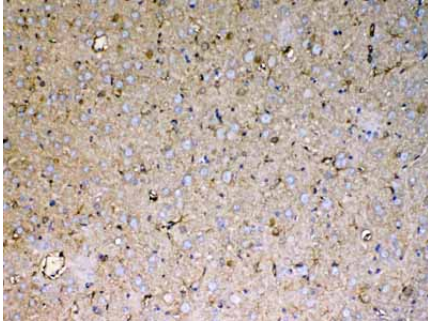


Figure 3. IHC analysis of Sacsin using anti-Sacsin antibody (ABO12855). Sacsin was detected in paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti-Sacsin Antibody (ABO12855) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

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