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Anti-SNAP23 Antibody

Catalog # ABO11081

Product Information

Application	WB, IHC-P, IHC-F, ICC
Primary Accession	O00161
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Synaptosomal-associated protein 23(SNAP23) detection. Tested with WB, IHC-P, IHC-F, ICC in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	8773
Other Names	Synaptosomal-associated protein 23, SNAP-23, Vesicle-membrane fusion protein SNAP-23, SNAP23
Calculated MW	23354
Application Details	Immunocytochemistry , 0.5-1 □g/ml, Human, - Immunohistochemistry(Frozen Section), 0.5-1 □g/ml, Human, Mouse, Rat Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Rat, Mouse, By Heat Western blot, 0.1-0.5 □g/ml, Human, Rat, Mouse
Subcellular Localization	Cell membrane; Peripheral membrane protein. Cell membrane; Lipid-anchor. Cell junction, synapse, synaptosome. Mainly localized to the plasma membrane.
Tissue Specificity	Ubiquitous. Highest levels where found in placenta.
Source	Eukaryota
Protein Name	Synaptosomal-associated protein 23(SNAP-23)
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human SNAP23(192-211aa DTNRDRIDIANARAKKLIDS), different from the related rat and mouse sequences by three amino acids.

Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, 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.
Sequence Similarities	Belongs to the SNAP-25 family.

Protein Information

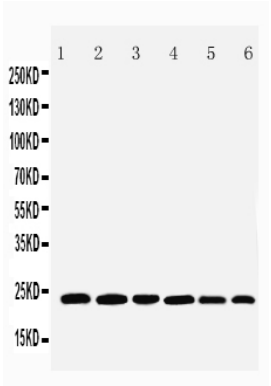
Name	SNAP23 (HGNC:11131)
Function	SNAREs (soluble N-ethylmaleimide-sensitive factor-attachment protein receptors) are essential proteins for intracellular membrane fusion. SNAREs localized on opposing membranes assemble to form a trans-SNARE complex, an extended, parallel four-helix bundle whose assembly releases energy that drives membrane fusion. The core SNARE complex typically consists of four alpha-helical domains, three from target membrane SNAREs (t-SNAREs) and one from a vesicle SNARE (v- SNARE) (PubMed:10036234, PubMed:11354632, PubMed:8663154, PubMed:9070898). SNAP23 is a t-SNARE (target-SNARE) that resides on target membrane and functions in the fusion of transport vesicles with the plasma membrane in immune cells (PubMed:30811271). In macrophages, regulates the stimulus-dependent vesicular transport of TLR4 from recycling endosomes to the plasma membrane by cooperating with STX11 and thereby plays a critical role in the recognition of microbial components and the induction of innate and adaptive immunity (PubMed:30811271). In skeletal muscle satellite cells, SNAP23 cooperates with its cognate SNAREs VAMP4 and STX11 to facilitate CD36 vesicular transport from endosomes to the plasma membrane, an essential step in muscle regeneration (By similarity).
Cellular Location	Cell membrane; Lipid-anchor
Tissue Location	Ubiquitous. Highest levels where found in placenta.

Background

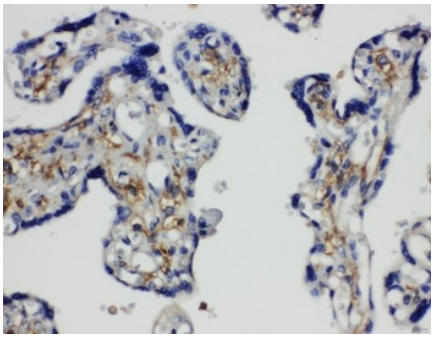
SNAP23(Synaptosomal-Associated Protein, 23-KD), also called SNAP23A, is a protein that in humans is encoded by the SNAP23 gene. The SNAP23 gene has 8 exons, with the initiation codon located in exon 2. The SNAP23 gene is mapped on 15q15.1-q15.2. The SNAP23 cDNA encodes a 211-amino acid polypeptide with a predicted mass of 23 kD. Its amino acid sequence is 59% identical to that of SNAP25. Northern blot analysis revealed that SNAP23 is ubiquitously expressed. SNAP23 is able to bind to multiple syntaxins as well as to multiple vesicle-associated membrane proteins. After relocation, SNAP23 is required for exocytosis, implying a crucial role in promoting membrane fusion. TIVAMP-containing vesicles were concentrated in the apical domain of epithelial cells. STX3A and SNAP23 were codistributed at the apical plasma membrane, where they formed N-ethyl maleimide-dependent SNARE complexes with TIVAMP and cellubrevin. SNAP23 is structurally and functionally similar to SNAP25 and binds tightly to multiple syntaxins and synaptobrevins/VAMPs. It is an essential component of the high affinity receptor for the general membrane fusion machinery and is an important regulator of transport vesicle docking and fusion.

Images

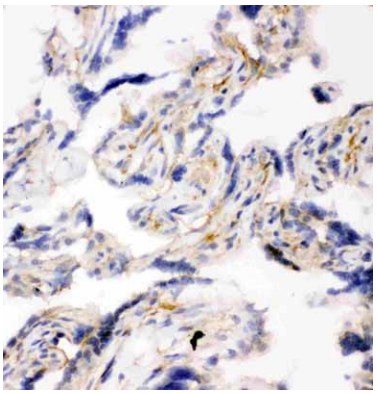
Anti-SNAP23 antibody, ABO11081, Western blottingLane 1: Rat Spleen Tissue LysateLane 2: Rat testis Tissue



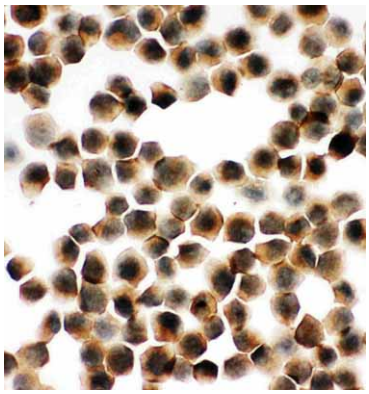
LysateLane 3: Rat Ovary Tissue LysateLane 4: HELA Cell LysateLane 5: MCF-7 Cell LysateLane 6: SKOV Cell Lysate



Anti-SNAP23 antibody, ABO11081, IHC(P)IHC(P): Human Placenta Tissue



Anti-SNAP23 antibody, ABO11081, IHC(F)IHC(F): Human Placenta Tissue



Anti-SNAP23 antibody, ABO11081,ICCICC: K562 Cell

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