

SEC61A1/2 Recombinant Rabbit mAb

Catalog # AP100285

Product Information

Application	WB, IP
Primary Accession	P61619
Other Accession	P61619
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	52265
Physical State	Liquid
Immunogen	A synthesized peptide derived from human SEC61A1
Epitope Specificity	350-450
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	10mM phosphate buffered saline(pH 7.4) with 150mM sodium chloride, 0.05% BSA, 0.02% Proclin300 and 50% glycerol.
SIMILARITY	Belongs to the secY/SEC61-alpha family.
SUBUNIT	Heterotrimeric complex composed of SEC61-alpha, SEC61-beta and SEC61-gamma.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Plays a crucial role in the insertion of secretory and membrane polypeptides into the ER. Required for assembly of membrane and secretory proteins. Tightly associated with membrane-bound ribosomes, either directly or through adapter proteins.

Additional Information

Gene ID	29927
Other Names	ADTKD5; CVID15; HNFJ4; HSEC61; SEC61; SEC61A; chunp6898; fb62c11; sec61a1; sec61a1l; wu:fb62c11; S61A1_BOVIN; Sec61 alpha-1; S61A1_CANLF; S61A1_HUMAN; S61A1_MOUSE; S61A1_RAT; S61A1_DANRE; sec61aa; SEC61 translocon subunit alpha 1; Sec61 alpha 1 subunit (S. cerevisiae)
Dilution	WB=1:500-2000,IP=1:20-50,Flow-Cyt=1:50-100
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	SEC61A1
Synonyms	SEC61A
Function	Component of SEC61 channel-forming translocon complex that mediates transport of signal peptide-containing precursor polypeptides across the endoplasmic reticulum (ER) (PubMed:12475939, PubMed:22375059, PubMed:28782633, PubMed:29719251, PubMed:32814900). Forms a ribosome receptor and a gated pore in the ER membrane, both functions required for cotranslational translocation of nascent polypeptides (PubMed:22375059, PubMed:28782633, PubMed:29719251). May cooperate with auxiliary protein SEC62, SEC63 and HSPA5/BiP to enable post-translational transport of small presecretory proteins (PubMed:22375059, PubMed:29719251). The SEC61 channel is also involved in ER membrane insertion of transmembrane proteins: it mediates membrane insertion of the first few transmembrane segments of proteins, while insertion of subsequent transmembrane regions of multi-pass membrane proteins is mediated by the multi-pass translocon (MPT) complex (PubMed:32820719, PubMed:36261522). The SEC61 channel cooperates with the translocating protein TRAM1 to import nascent proteins into the ER (PubMed:8616892). Controls the passive efflux of calcium ions from the ER lumen to the cytosol through SEC61 channel, contributing to the maintenance of cellular calcium homeostasis (PubMed:28782633). Plays a critical role in nephrogenesis, specifically at pronephros stage (By similarity).
Cellular Location	Endoplasmic reticulum membrane; Multi-pass membrane protein. Note=Localizes exclusively in granular structures in the endoplasmic reticulum (ER)
Tissue Location	Expressed in proximal and distal tubules in kidney (at protein level).

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