

SEC61A1 / SEC61 Antibody (aa463-476)
Goat Polyclonal Antibody
Catalog # ALS14247**Specification**

SEC61A1 / SEC61 Antibody (aa463-476) - Product Information

Application	WB
Primary Accession	P61619
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Hamster, Monkey, Pig, Chicken, Horse, Xenopus, Bovine, Dog
Host	Goat
Clonality	Polyclonal
Calculated MW	52kDa KDa

SEC61A1 / SEC61 Antibody (aa463-476) - Additional Information**Gene ID** 29927**Other Names**

Protein transport protein Sec61 subunit alpha isoform 1, Sec61 alpha-1, SEC61A1, SEC61A

Target/Specificity

Human SEC61A1 / SEC61.

Reconstitution & Storage

Store at -20°C. Minimize freezing and thawing.

Precautions

SEC61A1 / SEC61 Antibody (aa463-476) is for research use only and not for use in diagnostic or therapeutic procedures.

SEC61A1 / SEC61 Antibody (aa463-476) - 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:<a

[22375059](http://www.uniprot.org/citations/22375059), PubMed: [28782633](http://www.uniprot.org/citations/28782633), PubMed: [29719251](http://www.uniprot.org/citations/29719251)). May cooperate with auxiliary protein SEC62, SEC63 and HSPA5/BiP to enable post-translational transport of small presecretory proteins (PubMed: [22375059](http://www.uniprot.org/citations/22375059), PubMed: [29719251](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/32820719), PubMed: [36261522](http://www.uniprot.org/citations/36261522)). The SEC61 channel cooperates with the translocating protein TRAM1 to import nascent proteins into the ER (PubMed: [8616892](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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

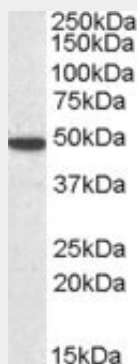
Expressed in proximal and distal tubules in kidney (at protein level).

SEC61A1 / SEC61 Antibody (aa463-476) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SEC61A1 / SEC61 Antibody (aa463-476) - Images



Staining (1 ug/ml) of human cerebellum lysate (35 ug protein in RIPA buffer).

SEC61A1 / SEC61 Antibody (aa463-476) - Background

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.

SEC61A1 / SEC61 Antibody (aa463-476) - References

Liu T.,et al.Submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases.
Li W.,et al.Submitted (AUG-1998) to the EMBL/GenBank/DDBJ databases.
Finke K.,et al.Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).