

**Goat Anti-SEC61A1 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1965a****Specification**

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**Goat Anti-SEC61A1 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P61619</a>
Other Accession	<a href="#">NP_037468</a> , <a href="#">29927</a>
Reactivity	Human, Mouse
Predicted	Pig, Dog, Cow
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	52265

**Goat Anti-SEC61A1 Antibody - Additional Information****Gene ID** 29927**Other Names**

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

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-SEC61A1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-SEC61A1 Antibody - 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:&lt;a href="http://www.uniprot.org/citations/12475939" target="\_blank"&gt;12475939&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/22375059" target="\_blank"&gt;22375059&lt;/a&gt;, PubMed:&lt;a href="http://www.uniprot.org/citations/22375059" target="\_blank"&gt;22375059&lt;/a&gt;)

[>28782633</a>, PubMed:<a href="http://www.uniprot.org/citations/29719251" target="\\_blank">29719251</a>, PubMed:<a href="http://www.uniprot.org/citations/32814900" target="\\_blank">32814900</a>\). Forms a ribosome receptor and a gated pore in the ER membrane, both functions required for cotranslational translocation of nascent polypeptides \(PubMed:<a href="http://www.uniprot.org/citations/22375059" target="\\_blank">22375059</a>, PubMed:<a href="http://www.uniprot.org/citations/28782633" target="\\_blank">28782633</a>, PubMed:<a href="http://www.uniprot.org/citations/29719251" target="\\_blank">29719251</a>\). May cooperate with auxiliary protein SEC62, SEC63 and HSPA5/BiP to enable post-translational transport of small presecretory proteins \(PubMed:<a href="http://www.uniprot.org/citations/22375059" target="\\_blank">22375059</a>, PubMed:<a href="http://www.uniprot.org/citations/29719251" target="\\_blank">29719251</a>\). 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 \(PubMed:<a href="http://www.uniprot.org/citations/32820719" target="\\_blank">32820719</a>, PubMed:<a href="http://www.uniprot.org/citations/36261522" target="\\_blank">36261522</a>\). The SEC61 channel cooperates with the translocating protein TRAM1 to import nascent proteins into the ER \(PubMed:<a href="http://www.uniprot.org/citations/8616892" target="\\_blank">8616892</a>\). 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 \(PubMed:<a href="http://www.uniprot.org/citations/28782633" target="\\_blank">28782633</a>\). Plays a critical role in nephrogenesis, specifically at pronephros stage \(By similarity\).](http://www.uniprot.org/citations/28782633)

#### **Cellular Location**

Endoplasmic reticulum membrane; Multi-pass membrane protein Note=Localizes exclusively in granular structures in the endoplasmic reticulum (ER).

#### **Tissue Location**

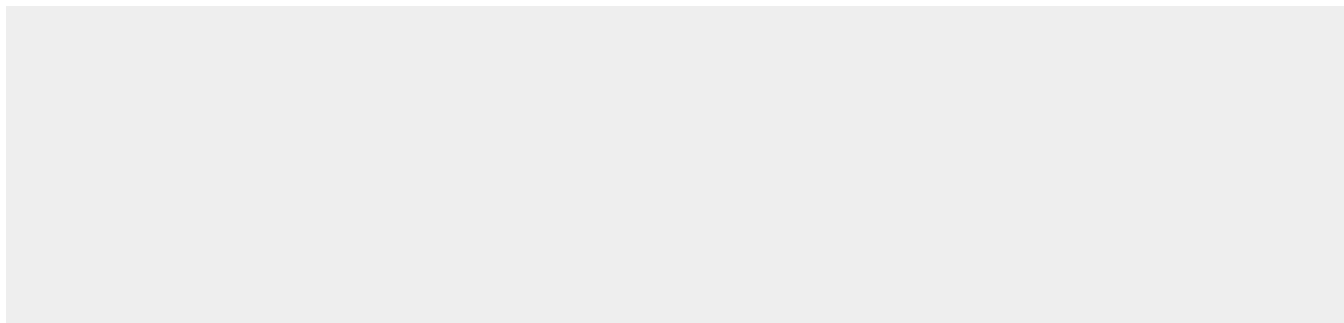
Expressed in proximal and distal tubules in kidney (at protein level).

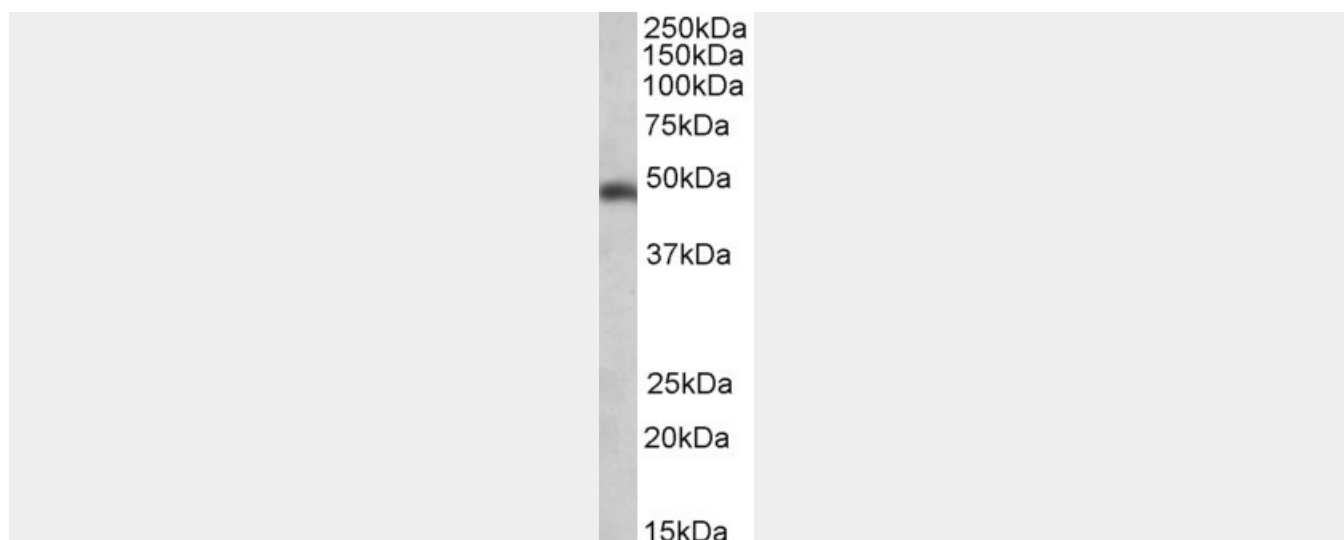
### **Goat Anti-SEC61A1 Antibody - Protocols**

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](#)

### **Goat Anti-SEC61A1 Antibody - Images**





AF1965a (0.3 µg/ml) staining of Human Brain (Cerebellum) lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

#### **Goat Anti-SEC61A1 Antibody - Background**

The protein encoded by this gene belongs to the SECY/SEC61- alpha family. It appears to play a crucial role in the insertion of secretory and membrane polypeptides into the endoplasmic reticulum. This protein found to be tightly associated with membrane-bound ribosomes, either directly or through adaptor proteins. This gene encodes an alpha subunit of the heteromeric SEC61 complex, which also contains beta and gamma subunits.

#### **Goat Anti-SEC61A1 Antibody - References**

Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.

Control of translocation through the Sec61 translocon by nascent polypeptide structure within the ribosome. Daniel CJ, et al. J Biol Chem, 2008 Jul 25. PMID 18480044.

Large-scale mapping of human protein-protein interactions by mass spectrometry. Ewing RM, et al. Mol Syst Biol, 2007. PMID 17353931.

Signal sequence and keyword trap in silico for selection of full-length human cDNAs encoding secretion or membrane proteins from oligo-capped cDNA libraries. Otsuki T, et al. DNA Res, 2005. PMID 16303743.

The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334.