

**Goat Anti-PEX5 Antibody (internal region)**  
**Purified Goat Polyclonal Antibody**  
**Catalog # AF4244a****Specification**

---

**Goat Anti-PEX5 Antibody (internal region) - Product Information**

|                   |                                                                                                                                   |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Application       | WB                                                                                                                                |
| Primary Accession | <a href="#">P50542</a>                                                                                                            |
| Other Accession   | <a href="#">NP_001124495.1</a> , <a href="#">NP_000310.2</a> ,<br><a href="#">NP_001124496.1</a> , <a href="#">NP_001124497.1</a> |
| Reactivity        | Human                                                                                                                             |
| Predicted         | Human                                                                                                                             |
| Host              | Goat                                                                                                                              |
| Clonality         | Polyclonal                                                                                                                        |
| Concentration     | 0.5                                                                                                                               |
| Calculated MW     | 70865                                                                                                                             |

**Goat Anti-PEX5 Antibody (internal region) - Additional Information****Gene ID** 5830**Other Names**

PEX5; peroxisomal biogenesis factor 5; FLJ50634; FLJ50721; FLJ51948; PTS1-BP; PTS1R; PXR1; OTTHUMP00000238192; OTTHUMP00000238193; OTTHUMP00000238194; OTTHUMP00000238195; OTTHUMP00000238353; OTTHUMP00000238354; OTTHUMP00000238356; PTS1 receptor; peroxin-5; peroxisomal C-terminal targeting signal import receptor; peroxisomal targeting signal 1 (SKL type) receptor; peroxisomal targeting signal 1 receptor; peroxisomal targeting signal import receptor; peroxisomal targeting signal receptor 1; peroxisome receptor 1

**Format**

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

**Immunogen**

Peptide with sequence C-QHTASDFVAKVDDPK, from the internal region of the protein sequence according to [NP\\_001124495.1](#); [NP\\_000310.2](#); [NP\\_001124496.1](#); [NP\\_001124497.1](#).

**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-PEX5 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-PEX5 Antibody (internal region) - Protein Information**

**Name** PEX5 {ECO:0000303|PubMed:10562279, ECO:0000312|HGNC:HGNC:9719}

### Function

Receptor that mediates peroxisomal import of proteins containing a C-terminal PTS1-type tripeptide peroxisomal targeting signal (SKL-type) (PubMed:<a href="http://www.uniprot.org/citations/7706321" target="\_blank">7706321</a>, PubMed:<a href="http://www.uniprot.org/citations/7719337" target="\_blank">7719337</a>, PubMed:<a href="http://www.uniprot.org/citations/7790377" target="\_blank">7790377</a>, PubMed:<a href="http://www.uniprot.org/citations/11336669" target="\_blank">11336669</a>, PubMed:<a href="http://www.uniprot.org/citations/12456682" target="\_blank">12456682</a>, PubMed:<a href="http://www.uniprot.org/citations/16314507" target="\_blank">16314507</a>, PubMed:<a href="http://www.uniprot.org/citations/21976670" target="\_blank">21976670</a>, PubMed:<a href="http://www.uniprot.org/citations/26344566" target="\_blank">26344566</a>, PubMed:<a href="http://www.uniprot.org/citations/11101887" target="\_blank">11101887</a>, PubMed:<a href="http://www.uniprot.org/citations/17157249" target="\_blank">17157249</a>, PubMed:<a href="http://www.uniprot.org/citations/17428317" target="\_blank">17428317</a>). Binds to cargo proteins containing a PTS1 peroxisomal targeting signal in the cytosol, and translocates them into the peroxisome matrix by passing through the PEX13-PEX14 docking complex along with cargo proteins (PubMed:<a href="http://www.uniprot.org/citations/12456682" target="\_blank">12456682</a>, PubMed:<a href="http://www.uniprot.org/citations/21976670" target="\_blank">21976670</a>, PubMed:<a href="http://www.uniprot.org/citations/26344566" target="\_blank">26344566</a>, PubMed:<a href="http://www.uniprot.org/citations/17157249" target="\_blank">17157249</a>). PEX5 receptor is then retrotranslocated into the cytosol, leading to release of bound cargo in the peroxisome matrix, and reset for a subsequent peroxisome import cycle (PubMed:<a href="http://www.uniprot.org/citations/11336669" target="\_blank">11336669</a>, PubMed:<a href="http://www.uniprot.org/citations/24662292" target="\_blank">24662292</a>).

### Cellular Location

Cytoplasm, cytosol. Peroxisome matrix. Note=Cycles between the cytosol and the peroxisome matrix (PubMed:11336669, PubMed:16314507). Following binding to cargo proteins containing a PTS1 peroxisomal targeting signal in the cytosol, recruited to the docking complex, composed of PEX13 and PEX14, leading to translocation into the peroxisome matrix along with cargo proteins (By similarity). Export and recycling to the cytosol is initiated by binding to the PEX2-PEX10- PEX12 ligase complex via its unstructured N-terminus that inserts into the ligase pore and emerges in the cytosol (By similarity). Cys-11 of PEX5 is then monoubiquitinated, promoting its extraction from peroxisomal membrane by the PEX1-PEX6 AAA ATPase complex (PubMed:16314507, PubMed:19208625, PubMed:24118911, PubMed:29884772) Extraction is accompanied by unfolding of the TPR repeats and release of bound cargo in the peroxisome matrix (By similarity). The TPR repeats refold in the cytosol and ubiquitination is removed by deubiquitinating enzymes, resetting PEX5 for a subsequent import cycle (By similarity).

{ECO:0000250|UniProtKB:A0A1L8FDW4, ECO:0000269|PubMed:11336669, ECO:0000269|PubMed:16314507, ECO:0000269|PubMed:19208625, ECO:0000269|PubMed:24118911, ECO:0000269|PubMed:29884772}

### Tissue Location

Detected in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.

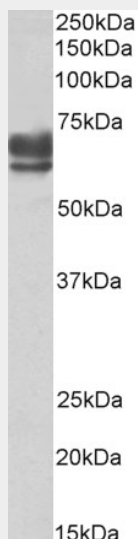
### Goat Anti-PEX5 Antibody (internal region) - Protocols

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-PEX5 Antibody (internal region) - Images**



AF4244a (0.1 µg/ml) staining of Human Kidney lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

#### **Goat Anti-PEX5 Antibody (internal region) - References**

Mapping the cargo protein membrane translocation step into the PEX5 cycling pathway. Alencastre IS, Rodrigues TA, Grou CP, Fransen M, Sá-Miranda C, Azevedo JE. J Biol Chem. 2009 Oct 2;284(40):27243-51.