

Peroxin 5 Polyclonal Antibody
Catalog # AP71860**Specification****Peroxin 5 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	P50542
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal

Peroxin 5 Polyclonal Antibody - Additional Information**Gene ID** 5830**Other Names**

PEX5; PXR1; Peroxisomal targeting signal 1 receptor; PTS1 receptor; PTS1R; PTS1-BP; Peroxin-5; Peroxisomal C-terminal targeting signal import receptor; Peroxisome receptor 1

Dilution

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

Peroxin 5 Polyclonal Antibody - 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:11101887, PubMed:11336669, PubMed:12456682, PubMed:16314507, PubMed:17157249, PubMed:17428317, PubMed:21976670, PubMed:26344566, PubMed:7706321, PubMed:7719337, PubMed:7790377). 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:12456682, PubMed:17157249, PubMed:21976670, PubMed:26344566). 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:11336669, PubMed:24662292).

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

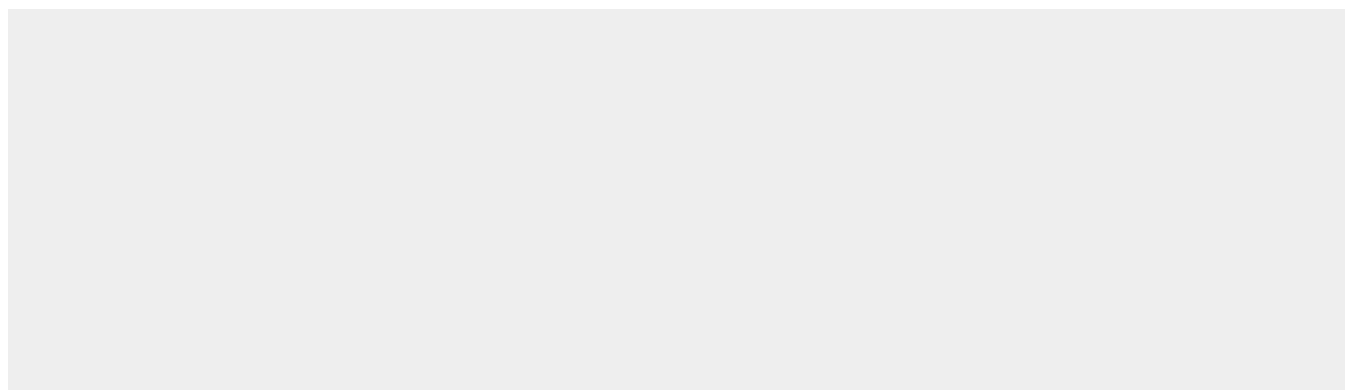
Detected in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.

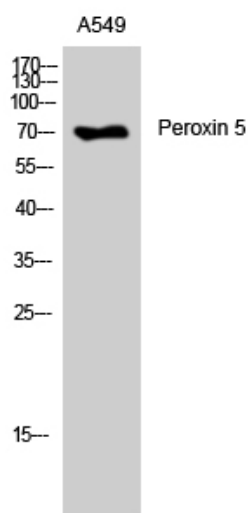
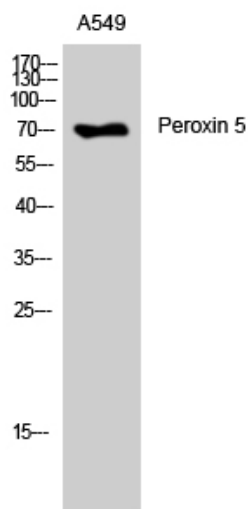
Peroxin 5 Polyclonal Antibody - Protocols

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](#)

Peroxin 5 Polyclonal Antibody - Images





Peroxin 5 Polyclonal Antibody - Background

Binds to the C-terminal PTS1-type tripeptide peroxisomal targeting signal (SKL-type) and plays an essential role in peroxisomal protein import.