# abcam

# Product datasheet

# Recombinant Human PEX19 protein ab111623

# 1 Image

**Description** 

Product name Recombinant Human PEX19 protein

Purity > 90 % SDS-PAGE.

ab111623 is purified using conventional chromatography techniques.

Expression system Escherichia coli

Accession P40855

Protein length Full length protein

Animal free No

Nature Recombinant

**Species** Human

**Sequence MGSSHHHHHHSSGLVPRGSH**MAAAEEGCSVGAEADRE

LEELLESALDDFD

KAKPSPAPPSTTTAPDASGPQKRSPGDTAKDALFASQEK

**FFQELFDSELA** 

SQATAEFEKAMKELAEEEPHLVEQFQKLSEAAGRVGSD

MTSQQEFTSCLK

ETLSGLAKNATDLQNSSMSEEELTKAMEGLGMDEGDGE

GNILPIMQSIMQ

NLLSKDVLYPSLKEITEKYPEWLQSHRESLPPEQFEKYQE

QHSVMCKICE

QFEAETPTDSETTQKARFEMVLDLMQQLQDLGHPPKELA

GEMPPGLNFDL DALNLSGPPGASGEQC

**Predicted molecular weight** 35 kDa including tags

Amino acids 1 to 296

Tags His tag N-Terminus

#### **Specifications**

Our Abpromise guarantee covers the use of ab111623 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

Mass Spectrometry

Mass spectrometry MALDI-TOF

1

Form Liquid

#### **Preparation and Storage**

### Stability and Storage

Shipped at  $4^{\circ}$ C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

pH: 8.00

Constituents: 0.32% Tris HCI, 10% Glycerol (glycerin, glycerine)

#### **General Info**

#### Function

Necessary for early peroxisomal biogenesis. Acts both as a cytosolic chaperone and as an import receptor for peroxisomal membrane proteins (PMPs). Binds and stabilizes newly synthesized PMPs in the cytoplasm by interacting with their hydrophobic membrane-spanning domains, and targets them to the peroxisome membrane by binding to the integral membrane protein PEX3. Excludes CDKN2A from the nucleus and prevents its interaction with MDM2, which results in active degradation of TP53.

#### **Tissue specificity**

Ubiquitously expressed. Isoform 1 is strongly predominant in all tissues except in utero where isoform 2 is the main form.

#### Involvement in disease

Defects in PEX19 are the cause of peroxisome biogenesis disorder complementation group 14 (PBD-CG14) [MIM:600279]; also known as PBD-CGJ. PBD refers to a group of peroxisomal disorders arising from a failure of protein import into the peroxisomal membrane or matrix. The PBD group is comprised of four disorders: Zellweger syndrome (ZWS), neonatal adrenoleukodystrophy (NALD), infantile Refsum disease (IRD), and classical rhizomelic chondrodysplasia punctata (RCDP). ZWS, NALD and IRD are distinct from RCDP and constitute a clinical continuum of overlapping phenotypes known as the Zellweger spectrum. The PBD group is genetically heterogeneous with at least 14 distinct genetic groups as concluded from complementation studies.

Defects in PEX19 are a cause of Zellweger syndrome (ZWS) [MIM:214100]. ZWS is a fatal peroxisome biogenesis disorder characterized by dysmorphic facial features, hepatomegaly, ocular abnormalities, renal cysts, hearing impairment, profound psychomotor retardation, severe hypotonia and neonatal seizures. Death occurs within the first year of life.

#### Sequence similarities

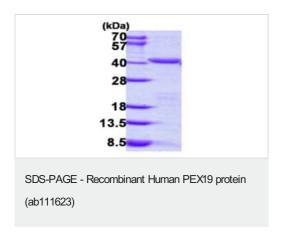
Belongs to the peroxin-19 family.

#### **Cellular localization**

Cytoplasm. Peroxisome membrane. Mainly cytoplasmic. Some fraction membrane-associated to

the outer surface of peroxisomes.

#### **Images**



15% SDS-PAGE showing ab111623 at approximately 34.6kDa (3μg).

(Molecular weight on SDS-PAGE will appear higher)

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