

For Research Use Only

ACOX1 Recombinant antibody, PBS Only (Detector)

Catalog Number: 83731-2-PBS



Basic Information

Catalog Number: 83731-2-PBS	GenBank Accession Number: BC010425	Purification Method: Protein A purification
Size: 100ug, Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 51	CloneNo.: 240754E3
Source: Rabbit	UNIPROT ID: Q15067	
Isotype: IgG	Full Name: acyl-Coenzyme A oxidase 1, palmitoyl	
Immunogen Catalog Number: AG1405	Calculated MW: 74 kDa	
	Observed MW: 70-74 kDa, 22 kDa	

Applications

Tested Applications:
WB, IHC, FC (Intra), Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
human, mouse, rat

Product Information

83731-2-PBS targets ACOX1 as part of a matched antibody pair:

MP00709-2: 83731-3-PBS capture and 83731-2-PBS detection (validated in Cytometric bead array)

MP00709-3: 83731-1-PBS capture and 83731-2-PBS detection (validated in Cytometric bead array, Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

Background Information

ACOX1 (Peroxisomal acyl-coenzyme A oxidase 1) is the first and rate-limiting enzyme in the peroxisomal fatty acid beta-oxidation pathway and catalyzes the desaturation of acyl-CoAs to 2-trans-enoyl-CoAs. It belongs to the acyl-CoA oxidase family and also named as ACOX, AOX, SCOX. It has 3 isoforms produced by alternative splicing with the molecular mass of 70-74 kDa and can be cleaved post-translationally into a 50-kDa and a 22-kDa subunit between Val468 and Ala469 (PMID: 10672038). Defects in ACOX1 are the cause of adrenoleukodystrophy pseudoneonatal (Pseudo-NALD).

Storage

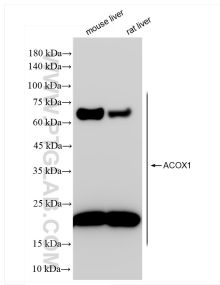
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

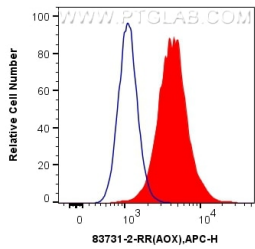
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

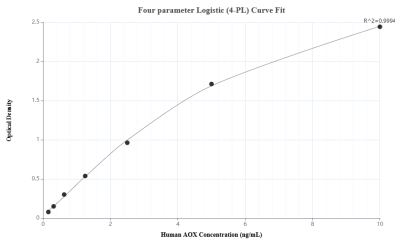
Selected Validation Data



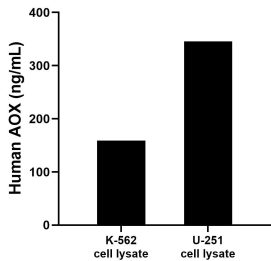
Various lysates were subjected to SDS PAGE followed by western blot with 83731-2-RR (ACOX1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83731-2-PBS in a different storage buffer formulation.



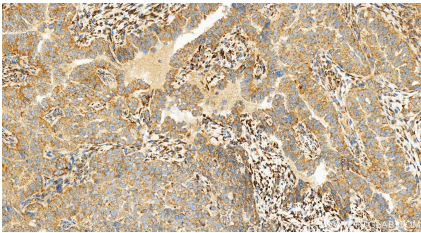
1x10⁶ A431 cells were intracellularly stained with 0.25 ug ACOX1 Recombinant antibody (83731-2-RR, Clone:240754E3) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 83731-2-PBS in a different storage buffer formulation.



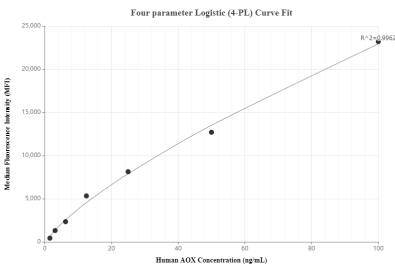
Sandwich ELISA standard curve of MP00709-3, Human AOX Recombinant Matched Antibody Pair - PBS only. 83731-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag1405. 83731-2-PBS was HRP conjugated as the detection antibody. Range: 0.156-10 ng/mL



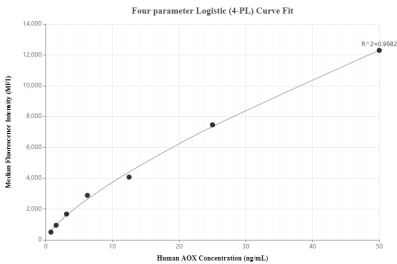
K-562 and U-251 cell lysates were measured. The human AOX concentration of detected samples was determined to be 158.79 ng/mL (based on a 2.1 mg/mL extract load) in K-562 cell lysate and 345.46 ng/mL (based on a 1.6 mg/mL extract load) in U-251 cell lysate.



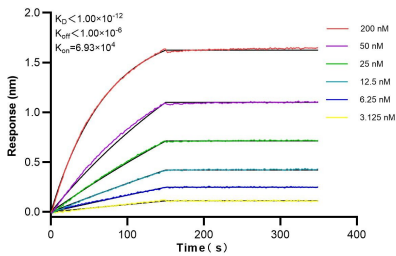
Immunohistochemical analysis of paraffin-embedded human ovarian cancer slide using 83731-2-RR (ACOX1 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83731-2-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00709-2, AOX Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83731-3-PBS. Detection antibody: 83731-2-PBS. Standard: Ag1405. Range: 1.56-100 ng/mL



Cytometric bead array standard curve of MP00709-3, AOX Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83731-1-PBS. Detection antibody: 83731-2-PBS. Standard: Ag1405. Range: 0.78-50 ng/mL



Biolayer interferometry (BLI) kinetic assays of 83731-2-RR against Human ACOX1 were performed. The affinity constant is below 1 pM.