abcam

BECKMAN COULTER

ab326176

SNv428 Anti-CPOX antibody [EPR11927(B)]

Rabbit Recombinant Monoclonal CPOX antibody - conjugated to SNv428.
Suitable for Flow Cyt(Intra) and reacts with Human samples.

This is a Beckman Coulter product distributed by Abcam.

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	SNv428
Excitation/Emission	Ex: 405nm, Em: 428nm
Storage buffer	pH: 7.4 Preservative: 0.1% Sodium azide Constituents: PBS, 0.2% BSA, 0.02% Pluronic F-68
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR11927(B)
Purification technique	Affinity purification Protein A
Concentration	0.2 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/40
Notes	-

Target data

See full target information CPOX

Function	Catalyzes the aerobic oxidative decarboxylation of propionate groups of rings A and B of coproporphyrinogen-III to yield the vinyl groups in protoporphyrinogen-IX and participates to the sixth step in the heme biosynthetic pathway.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For

details on our patents, please refer to RabMAb® patents.

This is a Beckman Coulter product distributed by Abcam.

The SuperNova dye included in this product is provided under an intellectual property license from Beckman Coulter Life Sciences. As this product contains the SuperNova dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity).

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	CPOX or coproporphyrinogen oxidase catalyzes the oxidation of coproporphyrinogen III to protoporphyrinogen IX an important step in heme biosynthesis. CPOX possesses a molecular mass of approximately 37–40 kDa. Expression occurs primarily in the mitochondria of liver and bone marrow cells. This enzyme plays a role in maintaining the balance of porphyrin intermediates and prevents accumulation that may cause cellular toxicity.
Biological function summary	CPOX converts coproporphyrinogen III into protoporphyrinogen IX playing a role in the heme biosynthetic pathway. As part of the terminal steps in heme production this transformation is important for synthesizing heme an essential component of hemoglobin myoglobin and various cytochromes. CPOX is not part of any larger enzyme complex but interacts with adjacent enzymes in the metabolic pathway to ensure efficient heme synthesis.
Pathways	CPOX functions in the heme biosynthesis pathway. This pathway is vital for the production of heme enabling the synthesis of hemoglobin and electron transport chains. CPOX acts sequentially after coproporphyrinogen III oxidase and before protoporphyrinogen IX oxidase. The enzyme works in concert with proteins such as uroporphyrinogen III synthase (UROS) in earlier steps of the pathway affecting overall heme production efficiency.
Associated diseases and disorders	Mutations or defects in CPOX can lead to hereditary coproporphyria (HCP) a disorder characterized by neurovisceral attacks and photosensitivity. This condition results from the accumulation of porphyrins due to a dysfunctional heme synthesis pathway. Additionally CPOX-related dysfunction can have implications in liver disorders affecting the balance of heme precursors. Improved understanding of CPOX and its interactions with proteins like UROS can provide insight into therapeutic targets for these conditions.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

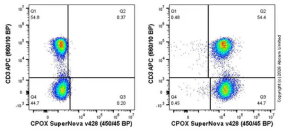
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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1 product image



Flow Cytometry (Intracellular) - SNv428 Anti-CPOX antibody [EPR11927(B)] (ab326176)

CPOX Flow Cytometry (Intracellular) staining of Human peripheral mononuclear cells (PBMCs) using rabbit Anti-CPOX antibody

Flow cytometry scatter plots showing human peripheral mononuclear cells (PBMCs), either stained with ab326176 (right) or FMO control (left). The cells were fixed and permeabilised using BD CytoFix/CytoPerm™ (20 min). The cells were incubated in 1x PBS containing 10 µg/ml human IgG, 10% normal goat serum and BD Pharmingen™ MonoBlock™ Leukocyte Staining Buffer (1/10) to block FC receptors and non-specific protein-protein interaction followed by the antibody (ab326176) (1x 106 in 100µl at 5 µg/ml (1/40)) for 30min on ice. The cells were simultaneously stained with CD3. Acquisition of >30000 events were collected using a 100 mW Violet laser (405nm) and 450/45 bandpass filter.This data was acquired using a Beckman Coulter CytoFlexLX flow cytometer.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.