

BCDO2 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11050a**Specification**

BCDO2 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	Q9BYV7
Other Accession	Q8HXG8 , NP_001032367.1 , NP_114144.3
Reactivity	Human, Mouse
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	65674
Antigen Region	71-100

BCDO2 Antibody (N-term) - Additional Information**Gene ID** 83875**Other Names**

Beta, beta-carotene 9', 10'-oxygenase, B-diox-II, Beta-carotene dioxygenase 2, BCO2, BCDO2

Target/Specificity

This BCDO2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 71-100 amino acids from the N-terminal region of human BCDO2.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

BCDO2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

BCDO2 Antibody (N-term) - Protein Information**Name** BCO2 ([HGNC:18503](#))

Function Broad specificity mitochondrial dioxygenase that mediates the asymmetric oxidative cleavage of carotenoids. Cleaves carotenes (pure hydrocarbon carotenoids) such as all-trans-beta-carotene and lycopene as well as xanthophylls (oxygenated carotenoids) such as zeaxanthin, lutein and beta-cryptoxanthin at both the 9,10 and the 9',10' carbon- carbon double bond. Through its function in carotenoids metabolism regulates oxidative stress and the production of important signaling molecules.

Cellular Location

Mitochondrion {ECO:0000250|UniProtKB:Q99NF1}.

Tissue Location

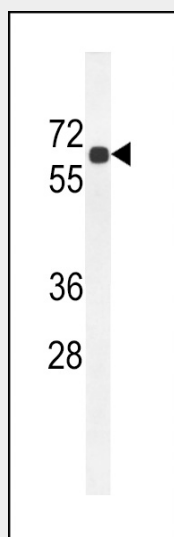
Highly expressed in retinal pigment epithelium. Also expressed in stomach, small intestine, liver, testis, kidney, adrenal gland, pancreas, heart, skeletal muscle and prostate (at protein level).

BCDO2 Antibody (N-term) - 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](#)

BCDO2 Antibody (N-term) - Images



BCDO2 Antibody (N-term) (Cat. #AP11050a) western blot analysis in mouse kidney tissue lysates (35ug/lane). This demonstrates the BCDO2 antibody detected the BCDO2 protein (arrow).

BCDO2 Antibody (N-term) - Background

BCDO2 catalyzes the asymmetric oxidative cleavage of beta-carotene in carotene metabolism (Kiefer et al., 2001 [PubMed 11278918]).

BCDO2 Antibody (N-term) - References

- Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
He, M., et al. Arterioscler. Thromb. Vasc. Biol. 30(4):885-890(2010)
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
Melzer, D., et al. PLoS Genet. 4 (5), E1000072 (2008) :
Wang, A.G., et al. Biochem. Biophys. Res. Commun. 345(3):1022-1032(2006)