

BCDO2 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP11050a**Specification**

BCDO2 Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [Q9BYV7](#)**BCDO2 Antibody (N-term) Blocking peptide - Additional Information****Gene ID** 83875**Other Names**

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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

BCDO2 Antibody (N-term) Blocking peptide - 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) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

BCDO2 Antibody (N-term) Blocking peptide - Images

BCDO2 Antibody (N-term) Blocking peptide - Background

BCDO2 catalyzes the asymmetric oxidative cleavage of beta-carotene in carotene metabolism (Kiefer et al., 2001 [PubMed11278918]).

BCDO2 Antibody (N-term) Blocking peptide - 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)