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ABP1 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP13940a

Specification

ABP1 Antibody (N-term) Blocking peptide - Product Information

Primary Accession P19801

ABP1 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 26

Other Names
Amiloride-sensitive amine oxidase [copper-containing], DAO, Diamine oxidase, Amiloride-binding protein 1, Amine oxidase copper domain-containing protein 1, Histaminase, Kidney amine oxidase, KAO, AOC1, ABP1, DAO1

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP13940a was selected from the N-term region of ABP1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

ABP1 Antibody (N-term) Blocking peptide - Protein Information

Name AOC1 {ECO:0000303|PubMed:19764817, ECO:0000312|HGNC:HGNC:80}

Function
Catalyzes the oxidative deamination of primary amines to the corresponding aldehydes with the concomitant production of hydrogen peroxide and ammonia (PubMed:12072962, PubMed:19764817, PubMed:239684, PubMed:8144586). Its preferred substrates are the diamines histamine and 1-methylhistamine and it could therefore play a role in allergic and immune responses (PubMed:12072962). Has a broad specificity for diamines and can also act on cadaverine and putrescine, two products of amino acid catabolism (PubMed:12072962). It could also

act on polyamines, like spermidine and spermine though less efficiently, and regulate various biological processes (PubMed:12072962, PubMed:239684).

Cellular Location
Secreted, extracellular space. Cell membrane; Peripheral membrane protein; Extracellular side

Tissue Location
Widely expressed with higher expression in placenta and kidney.

ABP1 Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

ABP1 Antibody (N-term) Blocking peptide - Images

ABP1 Antibody (N-term) Blocking peptide - Background

This gene encodes a membrane glycoprotein that isexpressed in many epithelium-rich and/or hematopoietic tissues andoxidatively deaminates putrescine and histamine. The protein mayplay a role in controlling the level of histamine and/or putrescinein these tissues. It also binds to and is inhibited by amiloride, adiuretic that acts by closing epithelial sodium ion channels.

ABP1 Antibody (N-term) Blocking peptide - References

Ruano, G., et al. Pharmacogenomics 11(7):959-971(2010)McGrath, A.P., et al. Acta Crystallogr. Sect. F Struct. Biol. Cryst. Commun. 66 (PT 2), 137-142 (2010) :Chambers, J.C., et al. Nat. Genet. 42(2):149-152(2010)McGrath, A.P., et al. Biochemistry 48(41):9810-9822(2009)Song, W.B., et al. World J. Gastroenterol. 15(31):3916-3919(2009)