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AKR1B10 Antibody (Center) Blocking peptide

Synthetic peptide
Catalog # BP14125c

Specification

AKR1B10 Antibody (Center) Blocking peptide - Product Information

Primary Accession O60218

AKR1B10 Antibody (Center) Blocking peptide - Additional Information

Gene ID 57016

Other Names
Aldo-keto reductase family 1 member B10, 111-, ARL-1, Aldose reductase-like, Aldose reductase-related protein, ARP, hARP, Small intestine reductase, SI reductase, AKR1B10, AKR1B11

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP14125c was selected from the Center region of AKR1B10. 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.

AKR1B10 Antibody (Center) Blocking peptide - Protein Information

Name AKR1B10

Synonyms AKR1B11

Function
Catalyzes the NADPH-dependent reduction of a wide variety of carbonyl-containing compounds to their corresponding alcohols (PubMed:9565553, PubMed:18087047, PubMed:12732097, PubMed:19013440, PubMed:19563777). Displays strong enzymatic activity toward all-trans- retinal, 9-cis-retinal, and 13-cis-retinal (PubMed:12732097, PubMed:18087047). Plays a critical role in detoxifying dietary and lipid-derived

unsaturated carbonyls, such as crotonaldehyde, 4- hydroxynonenal, trans-2-hexenal, trans-2,4-hexadienal and their glutathione-conjugates carbonyls (GS-carbonyls) (PubMed:19013440, PubMed:19563777). Displays no reductase activity towards glucose (PubMed:12732097).

Cellular Location
Lysosome. Secreted. Note=Secreted through a lysosome- mediated non-classical pathway

Tissue Location
Found in many tissues. Highly expressed in small intestine, colon and adrenal gland.

AKR1B10 Antibody (Center) Blocking peptide - Protocols

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

- Blocking Peptides

AKR1B10 Antibody (Center) Blocking peptide - Images

AKR1B10 Antibody (Center) Blocking peptide - Background

This gene encodes a member of the aldo/keto reductasesuperfamily, which consists of more than 40 known enzymes andproteins. This member can efficiently reduce aliphatic and aromaticaldehydes, and it is less active on hexoses. It is highly expressedin adrenal gland, small intestine, and colon, and may play animportant role in liver carcinogenesis.

AKR1B10 Antibody (Center) Blocking peptide - References

Bailey, S.D., et al. Diabetes Care (2010) In press :Kropotova, E.S., et al. Mol. Biol. (Mosk.) 44(2):243-250(2010)Heringlake, S., et al. J. Hepatol. 52(2):220-227(2010)Ravindranath, T.M., et al. J. Immunol. 183(12):8128-8137(2009)Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)