

AKR1B10 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14125c

Specification

AKR1B10 Antibody (Center) - Product Information

Application WB,E **Primary Accession** 060218 Other Accession NP 064695.3 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 36020 Antigen Region 101-130

AKR1B10 Antibody (Center) - 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

This AKR1B10 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 101-130 amino acids from the Central region of human AKR1B10.

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

AKR1B10 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

AKR1B10 Antibody (Center) - 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:12732097, PubMed:18087047, PubMed:19013440, PubMed:19563777, PubMed:9565553). 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

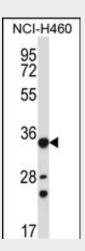
Found in many tissues. Highly expressed in small intestine, colon and adrenal gland.

AKR1B10 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

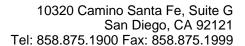
AKR1B10 Antibody (Center) - Images



AKR1B10 Antibody (Center) (Cat. #AP14125c) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the AKR1B10 antibody detected the AKR1B10 protein (arrow).

AKR1B10 Antibody (Center) - Background

This gene encodes a member of the aldo/keto reductase superfamily, which consists of more than 40 known enzymes and proteins. This member can efficiently reduce aliphatic and aromatic





aldehydes, and it is less active on hexoses. It is highly expressed in adrenal gland, small intestine, and colon, and may play an important role in liver carcinogenesis.

AKR1B10 Antibody (Center) - 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)