

AKR1B10 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody Catalog # ABV11675

Specification

AKR1B10 Polyclonal Antibody - Product Information

Application WB
Primary Accession 060218

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 36020

AKR1B10 Polyclonal Antibody - Additional Information

Gene ID 57016

Other Names

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

Target/Specificity

AKR1B10

Formulation

100 μg (0.5 mg/ml) of antibody in PBS pH 7.2, 0.01 % BSA, 0.03 % ProClin®, and 50 % glycerol.

Handling

The antibody solution should be gently mixed before use.

Background Descriptions

Precautions

AKR1B10 Polyclonal Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

AKR1B10 Polyclonal Antibody - 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:<a href="http://www.uniprot.org/citations/18087047"



target="_blank">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

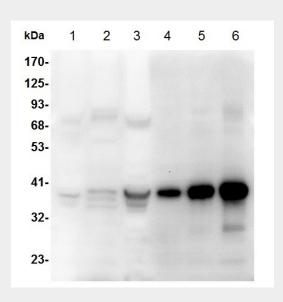
Found in many tissues. Highly expressed in small intestine, colon and adrenal gland.

AKR1B10 Polyclonal Antibody - Protocols

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

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

AKR1B10 Polyclonal Antibody - Images



Western blot analysis of anti-AKR1B10 antibody with (1)Jurkat cell, (2)3T3 cells and R.kidne lysate. Antibody sensitivity is also tested by (4)2ng, (5)50ng, (6)60ng human AKR1B10





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recombinant protein.

AKR1B10 Polyclonal Antibody - Background

AKR1B10 is a monomeric protein that efficiently catalyzes the reduction of aromatic and aliphatic aldehydes and ketones. AKR1B10 is ubiquitously expressed in many human tissues but is highly expressed in small intestine, colon and adrenal gland. This protein is pathogenically involved in diabetic complications. It has been reported that AKR1B10 is overexpressed in human tumors, such as liver, breast, and lung cancer, and may play a critical role in the development and progression of cancer.