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AKR1B10 Antibody (aa100-200)

Rabbit Polyclonal Antibody
Catalog # ALS12059

Specification

AKR1B10 Antibody (aa100-200) - Product Information

Application	**IHC**
Primary Accession	O60218
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**36kDa KDa**

AKR1B10 Antibody (aa100-200) - Additional Information

Gene ID 57016

Other Names
Aldo-keto reductase family 1 member B10, 1.1.1.-, ARL-1, Aldose reductase-like, Aldose reductase-related protein, ARP, hARP, Small intestine reductase, SI reductase, AKR1B10, AKR1B11

Target/Specificity
A portion of amino acids 100-200 of human AKR1B10 protein was used as the immunogen.

Reconstitution & Storage
Store at 4°C for short term applications. For long term storage, aliquot and store at -20°C.

Precautions
AKR1B10 Antibody (aa100-200) is for research use only and not for use in diagnostic or therapeutic procedures.

AKR1B10 Antibody (aa100-200) - 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

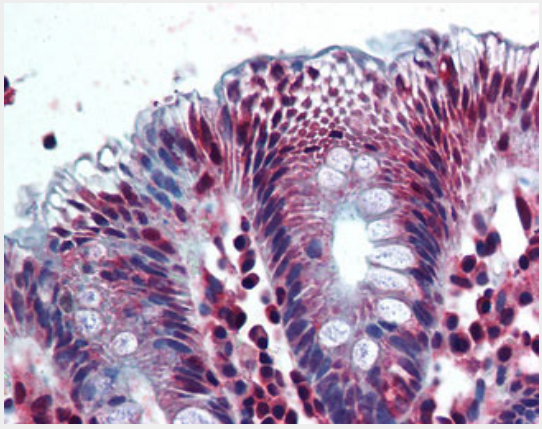
Tissue Location
Found in many tissues. Highly expressed in small intestine, colon and adrenal gland.

AKR1B10 Antibody (aa100-200) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

AKR1B10 Antibody (aa100-200) - Images



Anti-AKR1B10 antibody IHC of human colon.

AKR1B10 Antibody (aa100-200) - Background

Acts as all-trans-retinaldehyde reductase. Can efficiently reduce aliphatic and aromatic aldehydes, and is less active on hexoses (in vitro). May be responsible for detoxification of reactive aldehydes in the digested food before the nutrients are passed on to other organs.

AKR1B10 Antibody (aa100-200) - References

Cao D.,et al.J. Biol. Chem. 273:11429-11435(1998).
Hyndman D.J.,et al.Biochim. Biophys. Acta 1399:198-202(1998).
Heringlake S.,et al.Submitted (JUN-2002) to the EMBL/GenBank/DDBJ databases.

Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
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