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Goat Anti-AKR1B10 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1046a

Specification

Goat Anti-AKR1B10 Antibody - Product Information

Application	**WB, E**
Primary Accession	O60218
Other Accession	NP_064695, 57016
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**36020**

Goat Anti-AKR1B10 Antibody - 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

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-AKR1B10 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-AKR1B10 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: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.

Goat Anti-AKR1B10 Antibody - 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

Goat Anti-AKR1B10 Antibody - Images

AF1046a (0.03 µg/ml) staining of A549 cell lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

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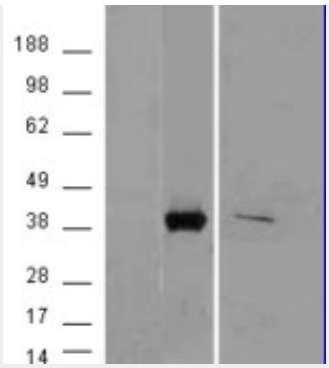

HEK293 overexpressing AKR1B10 (RC203177) with C-terminal tag (DYKDDDDK) and probed with anti-DYKDDDDK in the left panel and with AF1046a in the right panel (mock transfection in first and last lanes), tested by Origene.

Goat Anti-AKR1B10 Antibody - 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.

Goat Anti-AKR1B10 Antibody - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.
[Downregulation of AKR1B10 gene expression in colorectal cancer] Kropotova ES, et al. Mol Biol (Mosk), 2010 Mar-Apr. PMID 20586184.
Identification and expression analysis of the aldo-ketoreductase1-B10 gene in primary malignant liver tumours. Heringlake S, et al. J Hepatol, 2010 Feb. PMID 20036025.
Novel role for aldose reductase in mediating acute inflammatory responses in the lung. Ravindranath TM, et al. J Immunol, 2009 Dec 15. PMID 20007578.
Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. Talmud PJ, et al. Am J Hum Genet, 2009 Nov. PMID 19913121.