# Human Aldo-keto Reductase Family 1 Member B10 (AKR1B10) ELISA Kit | AKR1B10 elisa kit

Human Aldo-keto Reductase Family 1 Member B10 (AKR1B10) ELISA Kit

| CATALOG # | REACTIVITY |
|---|---|
| **AAA330849** | **Human** |

## PRODUCT SYNONYMS

Aldo-keto Reductase Family 1 Member B10 (AKR1B10); Human Aldo-keto Reductase Family 1 Member B10 (AKR1B10) ELISA Kit; AKR1B10; AKR1B11; AKR1B12; ALDRLn; ARL-1; ARL1; HIS; HSI; MGC14103; aldo-keto reductase family 1; member B10; member B11 (aldose reductase-like); aldose reductase-like 1; aldose re; AKR1B10 elisa kit

## PRODUCT SPECIFICATIONS

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| **Reactivity** | Human |
| **Specificity** | Human Aldo-keto reductase family 1 member B10 (AKR1B10) ELISA Kit has high sensitivity and excellent specificity for detection of Human AKR1B10. No significant cross-reactivity or interference between Human AKR1B10 and analogues was observed. |
| **Sequence Length** | 316 |
| **Assay Type** | Sandwich ELISA (Quantitative) |
| **Samples** | Cell Culture Supernatants, Serum, Plasma, Other Biological Fluids |
| **Detection Method** | Colorimetric |
| **Usage Notes** | * Do not mix components from different kit lots or use reagents beyond the kit expiration date.<br>* Allow all reagents to warm to room temperature for at least 30 minutes before opening.<br>* Pre-rinse the pipet tip with reagent, use fresh pipet tips for each sample, standard and reagent to avoid contamination.<br>* Unused wells must be kept desiccated at 4 degree C in the sealed bag provided.<br>* Mix Thoroughly is very important for the result. It is recommended using low frequency oscillator or slight hand shaking every 10 minutes.<br>* It is recommended that all samples and standards be assayed in duplicate or triplicate. |
| **Preparation and Storage** | Store at 2-8 degree C. |

## IMAGES



**Standard Curve (Sample)**
Fig.1. Human Aldo-keto reductase family 1 member B10 (AKR1B10) Standard Curve.

## ADDITIONAL INFORMATION

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| **Related Product Information for AKR1B10 elisa kit** | Description: This Human Aldo-keto reductase family 1 member B10 (AKR1B10) ELISA Kit employs a two-site sandwich ELISA to quantitate AKR1B10 in samples. An antibody specific for AKR1B10 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any AKR1B10 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for AKR1B10 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of AKR1B10 bound in the initial step. The color development is stopped and the intensity of the color is measured.<br><br>Background: Aldose reductase (AR) is an NADPH-dependent enzyme that was first identified by its ability to reduce glucose to sorbitol. The deduced 316-amino acid AKR1B10 protein shares 71% amino acid identity with AR. Northern blot analysis revealed that AKR1B10 is overexpressed in 54% of HCCs, while AR is overexpressed in 29% of HCCs. Northern blot analysis of normal tissues showed that unlike the ubiquitously expressed AR, AKR1B10 is expressed most abundantly in small intestine and colon, with lower levels in liver, thymus, prostate, testis, and skeletal muscle. AR and ARL1 reduce a similar spectrum of aromatic and aliphatic aldehyde substrates.Highest expression of AKR1B10 in adrenal gland, with modest expression in stomach, placenta, small intestine, and pancreas, and lower expression in all other tissues tested. |

## NCBI AND UNIPROT INFORMATION

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| **NCBI GI #** | 223468663 |
| **NCBI GeneID** | 57016 |
| **NCBI Accession #** | NP_064695.3 |
| **NCBI GenBank Nucleotide #** | NP_064695.3 |
| **UniProt Accession #** | O60218 |
| **NCBI Official Full Name** | aldo-keto reductase family 1 member B10 |
| **NCBI Official Synonym Full Names** | aldo-keto reductase family 1 member B10 |
| **NCBI Official Symbol** | AKR1B10 |
| **NCBI Official Synonym Symbols** | HIS; HSI; ARL1; ARL-1; ALDRLn; AKR1B11; AKR1B12 |
| **NCBI Protein Information** | aldo-keto reductase family 1 member B10 |
| **UniProt Protein Name** | Aldo-keto reductase family 1 member B10 |
| **UniProt Gene Name** | **AKR1B10** |
| **UniProt Synonym Gene Names** | AKR1B11; ARP; hARP |
| **UniProt Entry Name** | AK1BA_HUMAN |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: https://stage.aaabiotech.com/human-elisa-kits/aldo-keto-reductase-family-1-member-b10-akr1b10/330849