

36-2288: Anti-Aldo-keto Reductase Family 1 Member B1 (Adrenal Marker) Monoclonal Antibody(Clone: CPTC-AKR1B1-3)

Clonality :	Monoclonal
Clone Name :	CPTC-AKR1B1-3
Application :	WB,IF,IHC
Reactivity :	Human
Gene :	AKR1B1
Gene ID :	231
Uniprot ID :	P15121
Alternative Name :	AKR1B1; Aldehyde reductase; aldehyde reductase 1; Aldo-keto reductase family 1 member B1; aldo-keto reductase family 1, member B1 (aldose reductase); Aldose reductase; AR; Lii5-2 CTCL tumor antigen; low Km aldose reductase
Isotype :	Mouse IgG1, kappa
Immunogen Information :	Recombinant human full-length AKR1B1 protein

Description

AKR1B1, also designated as aldose reductase, is a member of the aldo/keto reductase superfamily, which consists of more than 40 known enzymes and proteins. This protein catalyzes the reduction of a number of aldehydes, including the aldehyde form of glucose, and is thereby implicated in the development of diabetic complications by catalyzing the reduction of glucose to sorbitol. It has also been shown to have decreased expression in adrenocortical cancer, and possibly play a role in adrenal tumorigenesis. It has been suggested that AKR1B1 could be investigated as a marker of malignancy for adrenal tumor diagnosis.

Product Info

Amount :	20 µg / 100 µg
Content :	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

Application Note

Western Blot (1-2ug/ml);,Immunofluorescence (1-2ug/ml);,Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 min at RT),(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes);

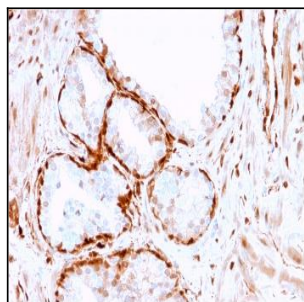


Fig. 1: Formalin-fixed, paraffin-embedded human Prostate Tumor stained with AKR1B1 Mouse Monoclonal Antibody (CPTC-AKR1B1-3).

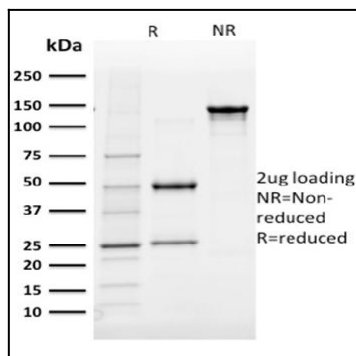


Fig. 2: SDS-PAGE Analysis Purified AKR1B1 Mouse Monoclonal Antibody (CPTC-AKR1B1-3). Confirmation of Purity and Integrity of Antibody.

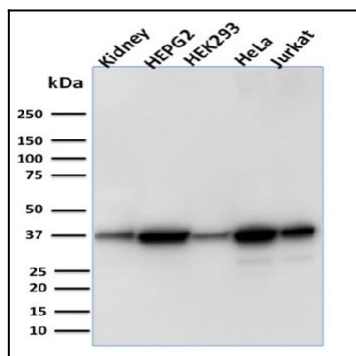


Fig. 3: Western Blot Analysis of Human Kidney tissue, Human HepG2, HEK293, HeLa and Jurkat cell lysate using AKR1B1 Mouse Monoclonal Antibody (CPTC-AKR1B1-3).

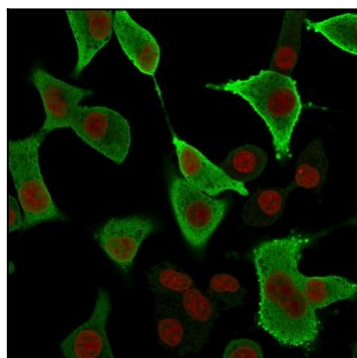


Fig. 4: Immunofluorescence Analysis of A549 cells labeling AKR1B1 with AKR1B1 Mouse Monoclonal Antibody (CPTC-AKR1B1-3) followed by Goat anti-Mouse IgG-CF488 (Green). The nuclear counterstain is Redot (Red)

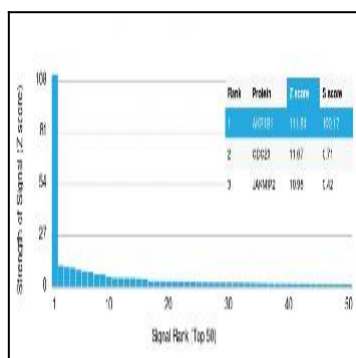


Fig. 5: Analysis of Protein Array containing more than 19,000 full-length human proteins using Aldo-keto Reductase Family 1 Member B1 mouse monoclonal antibody (CPTC-AKR1B1-3). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAB) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAB to its intended target. A MAB is considered to be specific to its intended target, if the MAB has an S-score of at least 2.5. For example, if a MAB binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAB to protein X is equal to 29.