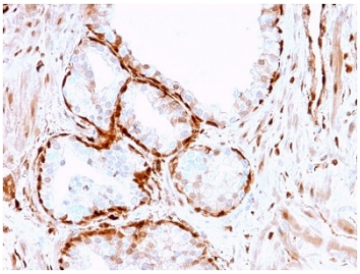
Aldose reductase Antibody / AKR1B1 [clone CPTC-AKR1B1-3] (V7403)

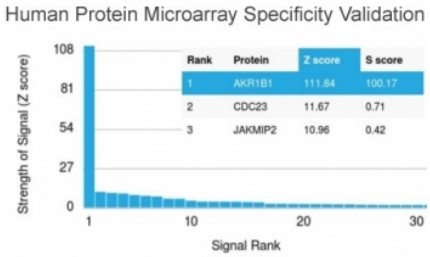
Catalog No.	Formulation	Size
V7403-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7403-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7403SAF-100UG	1 mg/ml in 1X PBS; sodium azide free	100 ug
V7403IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

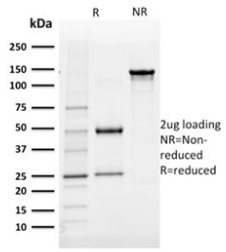
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CPTC-AKR1B1-3
Purity	Protein G affinity chromatography
UniProt	P15121
Localization	Cytoplasmic, nuclear
Applications	Western Blot : 1-2ug/ml Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT
Limitations	This Aldose reductase antibody is available for research use only.



IHC testing of FFPE human prostate cancer with Aldose reductase antibody (clone CPTC-AKR1B1-3). Required HIER: boil tissue sections in 10mM citrate buffer, pH6, for 10-20 min followed by cooling at RT for 20 min.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Aldose reductase antibody (clone CPTC-AKR1B1-3). These results demonstrate the foremost specificity of the CPTC-AKR1B1-3 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free Aldose reductase antibody (clone CPTC-AKR1B1-3) as confirmation of integrity and purity.

Description

AKR1B1, also deisgnated 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.

Application Notes

The optimal dilution of the Aldose reductase antibody for each application should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant protein was used as the immunogen for this Aldose reductase antibody.

Storage

Store the Aldose reductase antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).