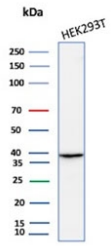
AKR1B1 Antibody / Aldose reductase [clone rAKR1B1/7295] (V9388)

Catalog No.	Formulation	Size
V9388-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9388-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9388SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

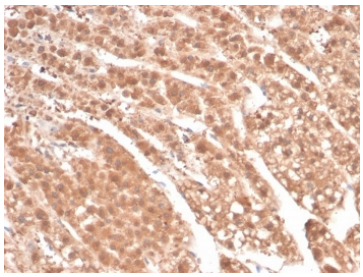
Recombinant MOUSE MONOCLONAL

Bulk quote request

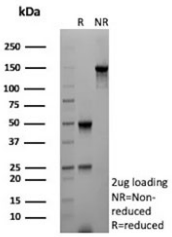
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rAKR1B1/7295
Purity	Protein A/G affinity
UniProt	P15121
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE): 1-2ug/ml Western blot: 2-4ug/ml
Limitations	This AKR1B1 antibody is available for research use only.



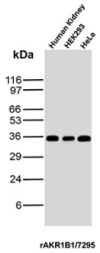
Western blot testing of human HEK293 cell lysate with AKR1B1 antibody (clone rAKR1B1/7295). Predicted molecular weight ~36 kDa.



AKR1B1 Antibody Adrenal Gland Immunohistochemistry. IHC staining of FFPE human adrenal gland tissue with AKR1B1 antibody (clone rAKR1B1/7295). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free AKR1B1 antibody (clone rAKR1B1/7295) as confirmation of integrity and purity.



AKR1B1 Antibody Tissue and Cell Line WB. Western blot analysis of human kidney tissue together with HEK293 and HeLa cell lysates using AKR1B1 Antibody clone rAKR1B1/7295. Strong bands are detected near approximately 35-40 kDa across all samples, consistent with the predicted molecular weight of Aldose reductase / AKR1B1, an oxidative stress-associated aldo-keto reductase family enzyme involved in reactive aldehyde detoxification, glucose-responsive signaling, and cellular redox regulatory pathways.

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.

For broader validation data and polyol pathway-associated metabolic signaling research applications, explore our Aldose Reductase Antibody / Polyol Pathway Marker page.

Application Notes

Optimal dilution of the AKR1B1 antibody should be determined by the researcher.

Immunogen

Recombinant human full-length AKR1B1 protein was used as the immunogen for the AKR1B1 antibody.

Storage

Aliquot the AKR1B1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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